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ORIGINAL LECTURES.

AN ADDRESS IN OBSTETRICS AND GYNECOLOGY.

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MR. PRESIDENT AND GENTLEMEN—FELLOWS OF THE NEW YORK STATE MEDICAL ASSOCIATION: If I interpret aright your wishes in requesting from me an address on obstetrics and gynecology on the occasion which brings you together in this city to-day, you desire, at the hands of one who has paid more attention to these subjects than the general reader and practitioner, an estimate from his standpoint of the present status of these departments of medicine, their relations to other branches, the advances which the past decade has accomplished for them, and the most signal lines of progress which have been pursued in the accomplishment of such advancement. If my conception of your wishes is correct, my task will not prove a difficult one, nor shall I be forced to weary you with prolix and uninteresting details.

Pardon a passing reference to the infancy of the science of obstetrics, which will serve merely to remind you of facts which you know as well as I do. Obstetrics as an art must always have existed, even among savage nations, and as civilization and refinement have increased, this art has become ever more and more perfect, keeping pace, as other arts have done, with the general advance in a people's knowledge. And thus it is that obstetrics, advancing from the ages of the past, from the period of the wonderful old man of Cos to that of Smellie and Levret, existed as a very perfect art indeed. But it was in no wise a science. He who was to elevate it to this high sphere was found in the person of the great Englishman, William Hunter, whose admirable work upon the gravid uterus did for this department of medicine what the eminent labors of Euclid did for mathematics, and which exists to-day as a valuable part of the library of every intelligent practitioner of midwifery.

From that time to the present a steady advance has been made, and in our day we see the reproach which once upon a time, and that not so very long ago, attached to the "man-midwife" entirely wiped away.

But all this has often been written of; let me leap over the wide chasm which divides two centuries from each other and speak of those improvements in this hundred-year-old science to which the past decade has given birth.

With how little pomp and parade are the greatest discoveries of science usually heralded! Who could have pictured to himself the wonderful results which were to follow the crude experiments of Count Rumford with steam; the watching of the swaying of a set of church lamps by Galileo; Newton's study under the apple-tree; or the flying of a Yankee printer's kite upon Boston Common? Yet the world has trembled and swayed under the results of these things, and mankind has felt their influence in every fibre and atom! In my judgment, one of the greatest achievements of modern pathology has been the discovery of the agency of certain lowly organized monads, micrococci, and microzymes, classed under the head of bacteria, in the production of septicæmia, pyæmia, and the long list of diseases which are their outcome. These atomic bodies, floating in the atmosphere, clinging to sponges and towels, and adhering to instruments and fingers, enter the blood through the open mouths of abraded surfaces. The prevention of the evil consequences of such entrance by the plans of Lister has accomplished a great deal for general surgery. Applied to obstetrics and gynecological surgery, the same methods are found to be fully as successful.

Progressive obstetricians are now pretty well agreed that the diseases which follow childbirth are due, for the most part, to the introduction of some contagium or poisonous element from without through the open mouths of exposed bloodvessels, laid bare by the parturient process, somewhere between the fundus uteri and the vulva. This theory once being accepted, it follows, as a natural deduction, that every means in the power of the obstetrician should be adopted for the prevention of the introduction of the morbific agents.

Even although the obstetricians of to-day are not prepared to make aseptic midwifery a rule wherever that art is practised, it is highly probable that in the very near future this position will be accepted. Even now this method, in modified form, is exerting a beneficial influence and steadily working its way to adoption in spite of the fact that it entails a good deal of trouble on the practitioner. That it can do no harm is quite evident. Does any man, can any conscientious obstetrician, maintain that strict cleanliness and the most scrupulous avoidance, so far as it lies in his power, of all things which can possibly admit of the entrance of the agents which in all probability produce puerperal septicæmia, will do any harm in the lying-in chamber? Supposing that only one life is saved out of a hundred deliveries, will any one assert that the saving of this one life would not repay him for the trouble which his preventive precautions have cost him? If the whole theory of the bacterial origin of puerperal fever is false, then in a quarter of a century from now all precautionary measures will disappear and the old *régime* will triumph. But if, perchance, this theory is valid and true, then no human power will prevent the realization of the prophecy that aseptic midwifery will be a rule as strict, as inviolable, and as obligatory as the aseptic surgery of amputations and of laparotomy is to-day. Look at

the surgery of London, of Paris, of Vienna, and of New York of twenty years ago, with its unclean hands, its fatally dirty instruments, its death-laden sponges, and its foul air, with its terrible mortality, and then look at the surgery of those same cities to-day; and he will be a bold man who dares gainsay the statement that in another quarter of a century no one will venture to rise in a scientific body and declare that any efforts at perfect cleanliness in the lying-in room are superfluous or absurd.

To free the parturient act from the dangers of septic poisoning, to prevent that scourge, the so-called puerperal fever, suppurative arthritis, pyæmia, embolism, and septic inflammation of the lungs, liver, and other organs, would be to save millions of lives in every generation, and to raise the science of obstetrics to an enviable height.

The germ theory has done more for obstetric medicine than what I have here alluded to. It has revolutionized the treatment of that variety of septicæmia which has been called puerperal fever. No longer do we depend in the treatment of this affection upon quinine, opium, and the application of emollients over the abdomen. By intrauterine injections the cavity of the uterus is thoroughly and repeatedly washed out with solutions of the bichloride of mercury 1 to 2000, or with a two and a half per cent. solution of carbolic acid. Surely no one who has experience in the new and the old methods will cavil at my statement that a great improvement has been effected by the former.

Were I called upon to sum up the treatment of a *declared undoubted* case of puerperal septicæmia, marked by the usual symptoms of pulse of 120, temperature 105° or 106°, which would meet the requirements of our time, I should give it categorically thus:

1. Quiet all pain by morphine hypodermically.
2. Wash out the uterine cavity with antiseptics.
3. Lower the temperature at once below a hundred, not by the barbarous method of the cold bath, but by the far better one of the coil of running water.
4. Feed the patient upon milk and nothing else, unless some good reason exists for changing it.
5. Exclude from her room all except the nurse and doctor, keeping her as quiet as possible.

Although the subject of extrauterine pregnancy has attracted attention from the earliest days of medicine, it is only of late years that it has been carefully studied, its diagnosis put upon a firm basis, and its treatment systematized. Laparotomy, with its wonderfully beneficent results, has been brought to bear upon these cases before and even after rupture of the vicarious fœtal nest. By this procedure, Jessup, of England, has succeeded in delivering at full term a child developed in the peritoneal cavity and saving at the same time the mother; and by it Tait, of the same country, has saved four women after the fœtal sac has ruptured. But it is to the fœticide powers of the electric current, first used by Allen, of Philadelphia, and then by Landis and Reeve, that the safety of such cases can best be trusted. This method is harmless to the mother, even if an incorrect diagnosis be made, and effectual in producing fœtal death if the diagnosis be correct. The number of lives which have already been thus saved is quite large, and is daily increasing. And these are lives which in former times would have been sacrificed to inattention, or want of power in diagnosis, or a lack of reliable remedial measures, even if diagnosis were rendered pretty certain.

It must not be supposed that in the olden time no cases of extrauterine pregnancy were saved. In making my statement I allude only to the systematic management of cases in their early periods, both as to diagnosis and treatment. In this country, even as early as 1759, Dr. John Bard successfully performed gastrotomy for the removal of a full-grown child from the peritoneal cavity. Dr. Baynham did so twice—once in 1791 and again in 1799; and Dr. John King, of Edisto Island, South Carolina, in 1816, cut through the vagina at full term, applied the forceps through the opening, and safely delivered a slave woman of a child which was developed in an abdominal pregnancy. But at that time, and long afterward—until our own times, I may say—the early diagnosis and early treatment of tubal pregnancy were found to be impossible. To-day, given a woman whose symptoms of pregnancy are irregular, who suffers pain in one iliac fossa, who has sudden gushes of blood, and who is subject to occasional attacks of faintness, and every intelligent practitioner would at once examine with reference to the existence of ectopic gestation, and, discovering it, would promptly proceed to destroy the fœtus in its false uterus.

Some one has very pithily said of late that the medicine of a hundred years hence will consist chiefly of prophylaxis and surgery. It appears to me that the statement, which has more than one grain of truth in it, applies with great force to our subject of to-day. The day is, I feel sure, not far distant when preventive measures will be applied with a most triumphant result to placenta prævia, puerperal nephritis, placental apnœa, contracted pelvis, the obstinate, and often fatal, vomiting of pregnancy, and that extreme hydræmia which so often results in thrombosis.

Obstetricians are beginning to question themselves as to whether it is wiser, in the interests of both child and mother, to wait and watch during the last two months of pregnancy until a sudden and furious hemorrhage makes an issue unavoidable in placenta prævia, a convulsion announces the point of tolerance in puerperal uræmia, or the cessation of fœtal movement tells the tale that the crippled intrauterine lung has ceased to have power enough to prolong fœtal life. The methods of inducing premature labor are now so simple, so certain, and so void of danger that they, more than at any previous time, present themselves as a sovereign resource in such cases.

And this is more especially true since Tarnier, by his glass-house with heated air regulated so as to meet the feeble heat-making process of the premature infant, renders the perpetuation of the lives of these beings so much more certain than when they were exposed to the chilling draughts of the chamber, and perhaps were at once dipped in water and exhausted by washing and dressing.

How often has every man in this room watched with intense interest and anxiety the following picture! A mother of several children, a beloved wife, and the centre of a large circle dependent upon her for love, for care, and for counsel, about the end of the seventh month develops the symptoms of placenta prævia, or severe puerperal nephritis. The physician cannot con-

ceal from those who surround her the fact that a violent hemorrhage or sudden convulsive seizure may at any moment destroy life. Should one of these occurrences take place, the patient's friends know full well that it may be hours before medical aid can be obtained in their dire necessity. Day after day the painful process of watching, hoping, dosing goes on; and gradually the symptoms grow worse until the final issue comes, and great joy is felt if, the child being sacrificed, the mother survives. It is to save all this, at the expense only of exposing the child to the danger of premature birth—a child, too, whose life would be at great hazard even if the pregnancy were allowed to proceed—that premature labor offers itself as a valuable resource.

The obstetric forceps is probably the most life-saving instrument which surgery has ever invented; and from the time of the Chamberlens, about 1647, thousands in every generation have endeavored to improve it, thousands have handed down their names in connection with it by suggesting trivial modifications, and thousands have in their efforts rendered themselves butts for the laughter of their successors by reason of the vanity which guided them. Few, very few, real improvements have been made in these instruments, and these improvements have occurred at long intervals. The Chamberlens used short, straight forceps; Levret and Smellie added length, and gave a pelvic curve to these, and nearly, if not quite, doubled their value; and Tarnier, of France, has, in our day, added a pair of tractors which enable the operator to pull more accurately in coincidence with the superior strait, while the handles are still in the inferior. This is the only real improvement in these instruments since the days of Levret and Smellie, and, like theirs, it marks an era in the history of the instrument, and a mile-stone in its advancing usefulness. There are cases, many cases, in which it is not called for; there are some, and not a few, in which it gives great facility in delivery.

Of late two substitutes have been proposed for the Cæsarean section—extirpation of the gravid uterus and its annexa after delivery of the child from it, or Porro's operation; and delivery of the child above the superior strait of the pelvis by cutting through the abdominal walls and vagina, or laparo-elytrotomy.

R. P. Harris, the only great medical statistician that America has yet produced, reports, in October, 1883, that the combined Porro and Porro-Müller operations saved, out of 116 cases, $48\frac{8}{29}$ per cent. of mothers, and 90 out of 118 children. Garrigues, in an able and exhaustive essay, reports in the same year that, out of eight operations, laparo-elytrotomy saved half of the mothers and all of the children except two, who died before the operation was undertaken.

In general terms, I think that, to state the comparative success of the two operations, it must be said that the results of laparo-elytrotomy have thus far been superior to those of the Porro-Müller operation, but that for some inexplicable reason the latter has found favor with the profession, both in this country and in Europe, which the former has failed to obtain.

From my experience with laparo-elytrotomy, I feel certain that, if a fair trial is given to it, it will surely yield a success greater than either the Cæsarean section or the Porro-Müller operation. It is so easy of performance, inflicts so little injury upon important viscera, and has already proved so successful, that I cannot doubt its merits.

We must not conclude that, because the general professional mind is not favorable to an operation which has been little tried, such an operation has "been weighed in the balance and found wanting." The following examples will prove the contrary: In 1834, Gossett, of London, discovered the present operation for vesico-vaginal fistula—position, metal suture, speculum, and all—operated twice, and published his operations. Yet it was left for Marion Sims, in 1852, to rediscover the whole matter. The greatest advance which has been made in medicine during the present century is the application of clinical thermometry, and its adoption is, as you all know, quite recent. Yet, about one hundred years ago, Currie, of England, fully developed this invaluable contribution to scientific medicine merely to see it pass out of notice and yield no results. And these are by no means the only instances of want of appreciation which can be quoted. I do not, therefore, despair of laparo-elytrotomy, but, from my personal knowledge of its advantages, am very hopeful of its future.

A little over a month ago Dr. Pilcher, of Brooklyn, having under his charge a case of labor in a deformed woman, aged twenty-one years, in good health, but with a rachitic pelvis, giving in its antero-posterior diameter of the superior strait a measurement of two inches, sent for Dr. Skene to aid him. After she had been in labor eight hours, Dr. Skene, with his well-known skill, performed laparo-elytrotomy and delivered her of a living child. To-day both mother and child are perfectly well, the after-history of the former being entirely uneventful, the wound healing by first intention, and the patient sitting up on the twenty-first day. It gives me great pleasure to avail myself of Dr. Pilcher's kind permission to report this, as yet unpublished, case to you to-day. And now, in all candor, let me ask you if a procedure which has effected such a result repeatedly, both as regards mother and child, should not be at least fairly tried before it is cast aside among the failures of obstetric surgery.

From the earliest records of medicine in Egypt, of Greece, and of Rome, the practice of gynecology can be readily traced, and although, like all other learning, it became paralyzed by the baneful influence of the dark ages, it was upon the revival of letters at once pursued. Before the middle of the present century, however, it did not in any respect deserve the name of a science. About that time, through two influences—the speculum, which since the days of Récamier had slowly worked its way into use, and anæsthesia, which enabled the surgeon to perform operations, both tedious and painful, upon the genital organs—the science of gynecology passed in great degree out of the domain of medicine, with its uncertain theories and doubtful resources, into that of surgery. And from that day a new era has existed for this department of medicine which has given it a place among others, not only of respectability, but of dignity.

I know not what view others may take as to the influence which has had so great a result upon gynecology as all have seen exerted during the past quarter of a century, but, in my judgment, it is the bringing into the service of the department the powerful aid of surgery.

Let me beg you to observe that I am not urging the claims of surgery at the expense of those of constitutional treatment in gynecology. Far from doing this, I am a strong advocate for the great advantage of constitutional treatment in diseases of the pelvic viscera of the female. There is no more clashing between medicine and surgery here than there is elsewhere; they should work together for good, the one sustaining and supplementing the other. Nevertheless, I fearlessly assume the position that an enlightened, conservative surgery is the pivot around which is to revolve the gynecology of the future, and that, were surgery withdrawn from this department to-day, it would be emasculated of the greatest part of its usefulness and efficiency, and would gradually lapse into the condition which it occupied half a century ago.

Every virtue has a vice which so closely corresponds to it, and so nearly resembles it upon superficial examination, that the real and the false are often confounded. Vanity often simulates modesty; cold policy passes current for charity; even arrogant pride is not rarely mistaken for humility. In medicine, cant, for there is cant in medicine as there is in religion, in politics, and in all other spheres in which the mind of man works, is often mistaken for that most laudable and meritorious of medical qualities, conservatism.

When vaccination was introduced, a great deal of medical cant was talked; and so when the pains of labor were first assuaged by chloroform; when ovarian tumors were submitted to laparotomy, and thousands of valuable lives were yearly saved; and so, also, when the obstetric forceps was put upon its proper basis as an instrument to be resorted to in the interest of mother and child before the symptoms of powerless labor had absolutely developed themselves. When, through the instrumentality of Simpson, Sims, and Simon, surgery was introduced into gynecology, a jeremiade was inaugurated, the echoes of which are only now dying away like the grumblings of a recent storm. Those who practised gynecological surgery were accused of recklessly mutilating the most beautiful of God's creation. Their conservatism was impeached, their judgment was impugned, their honesty was attacked. And what has been the outcome of the controversy? what is the present status of the moot question? By the aid of gynecological surgery, thousands of women, who formerly filled beds of suffering throughout their menstrual lives, are now in a month or two restored to perfect health; thousands who were doomed to early death are saved; thousands who for weary years visited the offices of one, and then another, and still another physician, resisting the powers of general tonics, and nitrate of silver, and potassa fusa, and the actual cautery, are now quickly enabled to perform all the duties of life without exhausting their resources by yearly stipends to the medical man. A woman suffers from profuse leucorrhœa, and backache, and difficult locomotion. Formerly she would have gone, times without number, to her doctor's office to have caustics applied to the ulcer of the neck of the womb, until he got tired of her or she of him. Now a lacerated cervix is cured by Emmet's great operation, and a limit is put to her patience and her husband's capacity to bear expense. A young woman, whose terrible sufferings at menstrual periods have half-crazed her, made her nearly an opium-eater or gin-drinker, and almost transformed her into one of those social vampires who suck the sympathies and vital force of a whole family in place of blood, instead of living on, a libel upon her sex, is cured by Battey's operation and restored to her place in life. Another, who has had the accident of lacerated perineum inflicted upon her by parturition, instead of passing her life in "ringing the changes" upon all the varieties of pessaries known to art, is cured by perineorrhaphy or colporrhaphy. And still another who, perchance, for twelve years has had an issue of blood, and who has suffered many things of many physicians, and has spent all that she had and was nothing bettered, but rather grown worse, after having exhausted all the hæmostatics and oxytocics and astringents, has a loop of wire, called a curette, carried into the uterine cavity, and fifteen or twenty fungoid growths, about as large as grains of barley, removed, and straightway the fountain of her blood is dried up.

Surely the time is at hand when the gynecological surgeon may boldly say to his detractors, "Enough of this, the logic of events condemns your futile efforts," and to those in his own department, "he who is not prepared to give his patients the advantages of surgery, either at his own hands or those of another, is not prepared to act honestly and fairly by those who intrust their interests to his keeping."

The pathological conditions which most frequently result in that chain of symptoms which mark the pelvic diseases of women may, I think, be fairly tabulated in the following manner:

1. Injuries received during parturition.
2. Natural or acquired imperfections of the uterus and ovaries.
3. Displacements of the uterus.
4. Benign neoplasms in the uterus, ovaries, or annexa.
5. Tubal and ovarian diseases.
6. Uterine catarrh.
7. Hyperplastic development of the endometrium.
8. Neuroses, such as vaginismus.
9. Inflammatory disease of the pelvic areolar tissue and peritoneum.
10. Malignant disease of the uterus or ovaries.

It may safely be said that in almost all of these a resort to surgical interference is often an essential to cure, while in most of them it is absolutely so.

No surgical procedure has more profoundly excited the interest of gynecologists during the last decade, and I may add that none has done more good, than the operation of trachelorrhaphy. That its future sphere of usefulness is a large and brilliant one, no one who has studied its results without prejudice, at the bedside, can for a moment doubt. May its originator long live to enjoy the evidence of the good which his labors have accomplished, and will continue for all time to effect.

Extirpation of the ovaries for three purposes: 1. For effecting a premature menopause; 2. For checking the growth of large fibroids; 3. For removal of ovaries and Fallopian tubes for hydro- and pyo-salpinx, and resulting pelvic inflammation—has now become a well-recognized and accepted resource in gynecology. The originators of these operations, for they really differ from each other in many essential respects, are Battey, Hegar, and Tait. So great are the benefits resulting

from these procedures in the various conditions for which they are practised that nothing can now stop their advance.

Nevertheless, as I look to-day into the future of any operation for removal of the ovaries, I see it the instrument of great abuse; I see it performed in numerous cases of mental disorder aggravated by the menstrual molimen in which it will fail of result; in many of uterine disease which could without its aid have been cured by care, patience, and skill; and in a great many cases in which diagnosis is obscure, and in which a resort to it is, to say the least, empirical. But I see opening before it, in the future, also a wide, very wide, field of usefulness; I see cases of women, doomed not only to misery themselves, but dooming whole families to life-long discomfort and anxiety entirely relieved by it; and I see many instances in which without it the curses of opium-eating and dipsomania, which frequently ingraft themselves upon the monthly recurring dysmenorrhœa, lifted by it from moral death to lives of happiness. Are we to reject agents capable of great good because by misdirection they are likewise capable of great evil? No; let us hail the good and apply it to man's wants, and let us strive as best we may to limit and control the evil which we cannot wholly avoid. No one can doubt that numberless evils have attended upon the discovery of gunpowder, yet no one can be blind to the fact that that discovery has done a vast deal for the advancement of civilization and the best good of mankind.

Even as early as the year 1560 Andreas à Cruce is said to have removed the uterus *per vaginam* for carcinoma uteri, and it is probable that even before his time Soranus had performed this desperate operation, which taxes in our day the skill, boldness, and resources of the surgeon. During the eighteenth century the operation was several times performed, and in 1813 Langenbeck had a successful case. In 1829 Récamier made improvements in it, and in 1878 Czerny revived the operation and placed it upon a firm basis. In 1883 Langer published the following statistics of the procedure:

Vaginal extirpation of cancerous uterus,	133
Recoveries,	95
Deaths,	38
The percentage of deaths being,	28

In 1884 P. F. Mundé published statistics of 256 cases, with a mortality of $24\frac{8}{10}$ per cent.

Freund, in 1878, revived the operation of the removal of the uterus by abdominal section, a procedure put in practice by Gutberlat as early as 1825. Freund's operation has now been performed 106 times, with a result of 72 deaths and 34 recoveries.

Not to detain you longer upon the present status of these two heroic procedures for desperate conditions, I would sum up the matter by the statement that Freund's operation, by reason of the great difficulties and dangers which attend its accomplishment, is now relegated to disuse; while vaginal extirpation of the uterus, although acknowledged to be a procedure of great danger, of undoubted difficulties, and of questionable results, has conquered for itself the position of a recognized, legitimate, and even valuable procedure.

An operation which ends fatally in one-quarter of all the cases submitted to it is a procedure of questionable character, of course; but let him who feels disposed to question the justice of the estimate here given remember the terrible future which inevitably attends upon the progress of uterine cancer—the physical suffering, the mental distress, the disgusting concomitant circumstances—and he must admit that any operation which has the power, even at the imminent risk of death, to lessen or remove these, should be hailed as a precious resource!

Uterine extirpation for cancer, however, is one of the most difficult and dangerous of the resources of surgery. As a compromise measure, removal of the entire neck by a conical section extending even up to the fundus uteri, and subsequent closure of the cervical lips by suture, often supersedes it with great advantage.

Deformities of the uterus which alter its shape, impair its nutrition, and interfere with the perviousness of its canal, have long been recognized as grave pathological factors; and even in our day the most sanguine practitioner must admit that their treatment is difficult, uncertain, attended by the dangers of cellulitis and peritonitis, and unsatisfactory to a lamentable degree.

At the present day there are three methods by which uterine deformities—anteflexion, retroflexion, and lateroflexion—are treated: First, the misshapen organ is repeatedly forced into better form by the introduction of the uterine sound, and subsequently it is in a lame, uncertain fashion sustained by a vaginal pessary; second, the tortuous cervical canal is cut at the internal and external os, and a uterine stem is introduced and kept in place by a sustaining vaginal cup; and, third, the whole uterine canal is at one sitting distended by a powerful "divulsor," or expanding forceps, to as great an extent as the tissue of the organ will bear. The first two of these methods are well known to you; it is the last I would now bring to your notice.

The heroic nature of this operation, its apparent brutality, and the dangers which one would naturally fear as a consequence of the forcible stretching of uterine tissue, which is really equivalent to absolute tearing of it, has retarded its advance to the position of an accepted operation. Its introducers and chief endorsers have been Priestly, Borck, Ball, and Ellinger, all of whom have claimed for it not only excellent results in cases of uterine deformity, but also a very marked immunity from the accidents which one would fear from it. In this city Dr. W. Gill Wylie has reported very favorably of it, and Prof. Goodell, of Philadelphia, has recently published a paper upon it which, with the strong endorsement of his name, will go far toward rendering it popular, and exciting others to a fairer trial of it than it has yet received. Personally I have no experience of it worth reporting, but I certainly feel it a duty to test the question of its use fully from the evidence which we now have before us.

In connection with my subject I would mention four drugs which have of late been introduced into practice, all of which appear to me to possess sufficient value to warrant their special mention here. These are the permanganate of potash, and the fluid extracts of the stigmata and ustilago maidis of the *Viscum album*, of the *Viburnum opulus* and *Viburnum prunifolium*.

Permanganate of potash, introduced by Sydney Ringer, of London, as an excitant of the menstrual

flow, is, I think, the best emmenagogue which has yet been discovered. The stigmata and ustilago maidis, or ergot of corn, are, like the fluid extract of *Viscum album*, or mistletoe, excellent oxytocic agents, and replace the ordinary secale cornutum very well, not only during labor, but in causing uterine contraction for the relief of metrorrhagia, uterine fibroids, subinvolution, etc.

The medicinal virtues of the *Viburnum opulus* and *Viburnum prunifolium* appear to consist in an influence of sedative character upon the utero-ovarian nerves. These drugs have been greatly lauded as preventives of threatened abortion, and remedies for the pains which attend disordered menstruation. Although in my experience they have fallen far short of the excellence which has been claimed for them, I feel sure that they possess a considerable degree of virtue.

Although the prolific theme which you have allotted to me, Fellows of the Association, would readily afford me material for a much longer address, the fear of taxing your patience admonishes me of the propriety of bringing my remarks to a close. In doing so, let me beg of you to accept my thanks for the kind attention which you have accorded me—an attention which has given zest to my efforts and rendered my task a pleasure instead of a labor.

ORIGINAL ARTICLES.

PERMANGANATE OF POTASSIUM: ITS ACTION AND USES.

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THERE is a general feeling of uncertainty regarding the real value of the permanganate of potassium as a remedy. Sharing in this to some extent, and desirous of arriving at definite conclusions, I have undertaken to collect the available evidence. This consists, chiefly, of clinical observation, and my own has been supplemented by such published experiences as have rewarded my search of authorities.

The prime objection of contemporary writers is, that permanganate is so quickly decomposed on coming into contact with organic matter, that its powers must then cease. I have, however, given reasons for supposing that the diffusibility of this salt is so rapid, that it has some action on the blood. For example: When used locally for the bite of a venomous serpent, the poison is destroyed, notwithstanding the organic matter in which it is enclosed. Before discussing its actions and uses, its physical and chemical qualities should be stated.

According to the United States Pharmacopœia, permanganate of potassium occurs in "deep, purple-violet, or nearly black, needle-shaped rhombic prisms, of a metallic lustre, permanent in the air, odorless, having a sweet, afterward disagreeable, astringent taste, and a neutral reaction. Soluble, with the exception of a scanty brown residue, in 20 parts of water at 59° Fah. (15° C.), and in 3 parts of boiling water."

According to the new notation, permanganate of potassium is represented by the formula $K_2Mn_2O_8$; and to the old, $KO.Mn_2O_7$. It is remarkable for the quantity of oxygen which it contains, and for the readiness with which it yields it up in its most active form, or as ozone;—yields it up so readily that it is one of the reagents used to determine the presence of organic matter in potable waters. This process illustrates one of the functions performed by permanganate of potassium in the human economy. The fine purple color of the solution of this salt in pure water is quickly discharged when brought into contact with organic matter; the oxygen seizes on and oxidizes the organic matter, and the permanganate is reduced correspondingly, the color changing to a dirty brown. It is this oxidizing power for which this salt is now employed as a deodorant and antiseptic.

The foul odors arising from decomposing organic matter are due chiefly to the compounds of hydrogen with sulphur and phosphorus—the sulphide and phosphide of hydrogen and some other products. The oxygen in its nascent state seizes on the hydrogen, and sulphur and phosphorus are set free, whence the destruction of odor. The chemical action which removes foul odors, does not, necessarily, imply the destruction of germs and other *materies morbi*. Bacteria, micrococci, and other minute organisms, so often associated with the ordinary products of putrefactive decomposition, are now known to be the cause of, or at least to convey, the poison of some diseases. Active oxygen, or ozone, or nascent oxygen, has an oxidizing or destroying action on some of these pathogenic agents, and hence permanganate of potasssum, whilst a deodorant, is also antiseptic.

Brought in contact with snake poison it destroys its toxic power. Thus, as Lacerda was the first to show, if inserted into the wound made by a noxious reptile, the poison is decomposed, and, consequently, has no effect on the system.[1] Lacerda, it is true, supposed that this agent would prove equally effective when administered by the stomach—that it would antagonize and render harmless the poison introduced at any point; but this supposition has proved to be erroneous. The effect of permanganate of potassium on animal poison is chemical; it is antidotal, but not physiologically antagonistic; and hence to be effective it must be brought into immediate contact with the poison, which is oxidized and its power thus destroyed.

Brought in contact with the tissues of the body, permanganate of potassium has an effect determined by the condition of the part. On the unbroken integument external and internal (mucous membrane), it does not have an irritant action, but the oxygen readily assails the uncovered tissue. It stains the skin a brownish color, and applied to an abrasion causes considerable smarting and burning, and is very superficially caustic. In small doses (two or three grains) well diluted, it does not irritate the stomach, but if the dose be large and in a solution too concentrated it causes local heat, a sense of irritation, even burning pain. The effect of a large dose, insufficiently diluted, is, doubtless, chiefly local; but if given in sufficient water on an empty

[1] Bulletin Gén. de Thérap. Vol. 101, p. 325, and vol. 104, p. 556.

stomach, diffusion into the blood probably takes place to some extent.

The systemic action of permanganate of potassium may be studied in several modes: the effect of the salt as a whole; the effects of its chief constituent, active oxygen or ozone.

It has been alleged that this salt cannot act beyond the stomach, because there its oxygen must be appropriated by the organic matter contained in that organ and the mucous membrane, but certain physiological and clinical facts support the opinion above expressed regarding its diffusion into the blood. Vulpian[1] has studied the effects produced by this remedy when thrown directly into the veins. This mode of experimentation is open to many objections. The bulk of the material injected into the veins, were it water merely, must, and as we know, does have an effect on the functions of the circulatory organs. Furthermore, the emboli produced by the chemical action of the salt on the formed elements and on the fibrin, must of necessity cause serious disturbances at widely separated points and in various functions. The results he noted were of two kinds, consisting of chemical changes in the blood, and the effects of the salt at the points of elimination. In the first category were pulmonary infarctions, dissolved corpuscles, bloody urine and ecchymoses; in the second, were congestion of the gastro-intestinal mucous membrane, and of the kidneys. Obviously such experiences are not characteristic, for they follow the injection into the blood of various chemical agents.

As the chief, if not the only therapeutic effects of permanganate of potassium, are due to its oxygen, it is most important to ascertain the effects of this agent. The modern investigations, especially those of Demarquay[2] and Hayem,[3] of France; Waldenburg,[4] of Germany; Birch[5] and Mackey,[6] of England; and A. H. Smith,[7] of New York, have thrown a flood of light on the actions and uses of this agent. More recently the researches of Binz[8] on the effects of ozone have been successful in clearing up much of the mystery surrounding the physiological actions of this peculiar form of oxygen. The results of the action of oxygen thus studied, are quite in harmony with *a priori* conceptions. On the most superficial view, it would be regarded as a vital stimulant, and as an agent promoting the activity of the combustion process in all parts of the body. This notion of its actions is supported by investigation made by the various observers above mentioned.

The recent studies of Binz[9] of the effects of ozone, are peculiarly instructive. He finds that ozone has a hypnotic action, a calmative effect on the central nervous system, due, he supposes, to an impression on the cells of the gray matter, whereby their functional activity is suspended. In some trials on his own person, he experienced the following results: his respiration became deeper and more easy and he had that feeling of well-being produced in the healthy by the respiration of a pure and exhilarating atmosphere. Some drowsiness came on, with an agreeable languor, and afterwards there was experienced some heaviness in the head (hebetude), together with a general sense of fatigue, but no other disagreeable sensations.

The powers possessed by the permanganate of potassium as a general stimulant are well exhibited in the active emmenagogue property which it has been shown to possess by Drs. Ringer and Murrell. In cases of amenorrhœa due to deficient activity, it seems to promote the function in a remarkable degree. The same power, which can so stimulate the sexual functions, must, when exerted in other directions, prove equally effective.

Mode of prescribing permanganate of potassium. As this salt is so readily decomposed, yielding up its oxygen to any organic matter present, it is obviously necessary to be very careful in preparing and administering it. It should be given dissolved in pure water, or in compressed tablets or pellets. I have used the compressed tablets of Messrs. John Wyeth & Brother, of Philadelphia, which contain no excipient, and are, therefore, entirely free from objection, the material being simply compressed without the addition of any foreign material. They are readily administered in this form, or they can be dissolved in pure water, whenever a solution is desired. These tablets are typically adapted to the purpose—indeed present advantages not possessed by any other possible mode of administration.

Ordinary distilled water after standing a few hours exposed to the air, begins to exhibit evidences of turbidity, due to the growth of an organism, a penicillum, and after some days it becomes so much clouded with organic matter as to be unfit for the solution of permanganate of potassium. River water or rain water boiled and filtered may suffice for immediate use, but whenever it can be obtained, fresh distilled water should be employed for this purpose. A pellet of this salt may be used to determine the requisite freedom from organic matter. Dropped into the water under examination, the beautiful violet color imparted to it should not be discharged. The prompt disappearance of the color signifies the presence of chemical agencies fatal to the permanence of the salt. The solution should be well diluted when taken, and should be given when the stomach is empty. A small dose repeated at short intervals, say a grain or two every half-hour, until four or six grains have been taken, is preferable to the exhibition of this amount at one dose. Given in this way, and commencing the administration in about four hours after meals, the diffusion of the salt into the blood is, probably, secured. There are two periods during the day, when the administration of the remedy can be practised—the proper interval after breakfast, and after dinner or luncheon The same considerations should govern the administration of the pellets or

[1] Bulletin Gén. de Thérap. Vol. 102, p. 251.
[2] Essai de Pneumatologie Médicale, etc. Paris, 1866.
[3] Bull. Gén. de Thérap.
[4] Die locale Behandlung der Krankheiten der Athmungsorgane. Berlin, 1872. P. 620 *et seq.*
[5] The Therapeutic Action of Oxygen. London, 1857, and British Med. Journal, December 24 and 31, 1859.
[6] The Practitioner. Vol. 2, p. 278.
[7] The New York Medical Journal. Vol. 71, p. 152.
[8] Berliner klin. Wochenschrift, No. 43, 1882.
[9] Ibid., *op. cit.*

compressed pills, undissolved, and sufficient pure water should be taken after them.

Therapeutic applications. On the chemical actions of permanganate of potassium we have a sure basis on which to construct a systematic therapy. The readiness with which this salt parts with its oxygen, is urged against its real utility as a remedy, but for reasons already given it is concluded that this action does not occur with sufficient promptitude to prevent its diffusion into the blood to some extent, otherwise we should in vain try to account for its practical utilty.

Having more or less irritating quality, permanganate of potassium is contraindicated in cases of acute inflammation of the stomach. It is specially indicated in chronic *gastric and gastro-intestinal catarrh*, accompanied by fermentative changes in the food. Eructations of gas, vomiting of a yeast-like material containing *sarcinæ*, and an acid fermentation of the starchy and saccharine constituents of the food, are relieved often very promptly by the administration of this salt. As the action is intended to be restricted to the stomach contents, the proper time for the administration of the remedy is two or three hours after meals.

When the catarrhal process extends into the duodenum, and involves also the bile-ducts, this remedy has seemed to be highly efficient. Beside the evidences of stomachal and intestinal indigestion there is present more or less biliousness, manifested in a muddy complexion, yellow conjunctiva, high-colored urine and a general *malaise* due to the presence in the blood of immature materials and unoxidized products of the retrograde metamorphosis. This is a very common state of things and is the result of several factors: improper feeding, catarrh of the gastro-intestinal and hepatic mucous membrane, and imperfect preparation of the food for absorption. The permanganate, in this condition of things, does good in several directions: it checks fermentation of the food elements prone to this process, acts favorably on the catarrh of the mucous membrane, but especially promotes oxidation in the tissues undergoing metamorphosis, and whilst it thus stimulates metabolism, helps to consume in the normal way the products of waste. Uric acid which appears in the urine, under the action of permanganate of potassium is converted into urea, the form in which it is normally excreted.

It follows from the foregoing considerations, that permanganate of potassium is a remedy of great value in *lithæmia*. Clinical experience is quite in harmony with physiological deductions. In giving this remedy in this affection, two purposes may be accomplished by it: the catarrh of the mucous membrane and the fermentation of the foods may be favorably influenced, and the insufficient oxidation manifested by an excess of urid acic in the urine, may be wholly relieved.

It follows, also, from the foregoing considerations that permanganate of potassium must be useful in an affection cognate to lithæmia—the hepatic form of glycosuria, and in this instance, again, clinical experience confirms physiological observation. The special field of its usefulness in relation to diabetes, is in those cases in which there appears to be both overproduction of glycogen, and insufficient consumption, or combustion, or oxidation of this material. It will be found most beneficial in the obese subjects of glycosuria, in whom the presence of much uric acid in the blood signifies at the same time inadequate preparation for absorption of certain food constituents and a supply of oxygen insufficient to convert uric acid into urea. In other forms of diabetes, especially of nervous origin, permanganate of potassium has no beneficial effect.

For the same reason that this salt is useful in lithæmia and glycosuria, it is a remedy for obesity. According to the observation of the writer, there is no remedy more effective than this in the treatment of *obesity*, and for the relief of the disorders of digestion which have a pathogenic relation to this malady. Of course, certain changes in the diet must be made and active exercise enjoined, but the good effects of the remedy are manifest without any aid from a change in diet and from exercise. The *methodus modendi*, is, so to speak, of the physiological order. The surplus and useless material, such as under existing circumstances is transformed into fat, is oxidized and consumed, and is excreted as carbonic acid and water. As it acts thus, to increase the performance of a function, obviously the curative effect is an exercise of a physiological power, and different from all the usual remedies for obesity, does not operate injuriously if used with the least discretion.

One of the most important therapeutical applications of the permanganate of potassium, and a recent discovery, is in the treatment of *amenorrhœa*. We owe this valuable improvement, as indeed many others, to Drs. Ringer and Murrell. They have shown that this remedy is remarkably certain when applied in suitable cases. Given in doses of two to five grains three times a day, for several days preceding the menstrual molimen, this agent is quite sure to start the flow. The kind of case to which the permanganate is adapted is that characterized by torpor, anæmia, or deficient activity of the menstrual apparatus. On the other hand, it is contraindicated whenever an acute congestion or a general condition of sthenic reaction exists. Confirmatory evidence has been offered in this country, as well as in England and on the Continent. For example, we find the following coming from Russia: Dr. S. M. Lvaff prescribed it in ten cases of amenorrhœa. In seven of these the remedy succeeded—the menstrual function was restored to its normal activity.[1] The good results achieved by the use of the permanganate in amenorrhœa induced Dr. A. V. Vargunin to essay its administration in *dysmenorrhœa*, characterized by scanty menstruation and anæmia. In this case, also, the result was fortunate, and complete relief was obtained.[2] Congestive or mechanical dysmenorrhœa are conditions not suitable for the action of such a remedy.

It is probable that *functional impotence* in the male will be improved by this remedy, provided the conditions present are those of anæmia and depression.

[1] Medicinskt Vestnik, No. 43, 1883. Quoted.
[2] Vratch, No. 3, 1884. Quoted.

Topical and Disinfectant Uses.—Permanganate of potassium has long been known as a disinfectant and deodorizer. Since the agency of minute organisms, as bacteria, bacilli, micrococci, etc., in setting up septic processes in the body, has been established, the various substances employed as disinfectants have been assigned to different relative positions, for now the important point is to procure the death of the living germs and their progeny. An agent destroying foul odors does not necessarily, does not indeed usually, destroy the germs of disease.

The permanganate of potassium is to be classed with the "deodorizers" rather than with the "antiseptics." From this point of view it is an "elegant" disinfectant. In an elaborate research on the antiseptics and their power to destroy bacteria, Bucholtz[1] does not include this salt amongst the list of agents possessing the power to destroy bacteria and similar organisms. Again, M. Ratimoff,[2] in a paper on antiseptics and the results of their use in surgical practice, has, also, ignored the permanganate, not mentioning it amongst those agents that have true antiseptic power. The most thorough, and from the modern point of view the most scientific, treatment of the subject of antiseptics is the essay of Dr. Miguel.[3] He assigns permanganate of potassium to a group containing the salts of lead, zinc, nickel, and cobalt, alum, tannin, the mineral acids, and other agents. The first group is composed of "substances eminently antiseptic;" the second of "substances very strongly antiseptic;" the third of "substances strongly antiseptic;" the fourth of "substances moderately antiseptic;" the fifth of "substances feebly antiseptic," and the sixth of "substances very feebly antiseptic." Permanganate of potassium, in a list of 91 agents having qualities more or less antiseptic, stands 44, the bichloride of mercury being first. The important point, however, to be determined, in respect to the powers of any antiseptic, is its effect on the vitality of living germs or microbes. In the attempt to ascertain this quality of any antiseptic, certain precautions must be observed if the results are to possess any real value. These precautions have been well stated in a memoir of N. Jalan de la Croix,[4] whose experimental inquiry was conducted under the observation of Prof. Dragendorff.

Bacteria developed in different liquids do not possess the same power of resistance to the action of antiseptics; they resist more successfully when contained in their native fluid than when in culture solutions. The same facts are true of the spores, which are sterilized with more difficulty in their native element than when transplanted into foreign fluids.

Most of the experiments made have been with microbes contained in culture-fluids; for example, the very able and elaborate research made by Dr. Sternberg.[1] Under these circumstances the results are better than can be achieved from the use of the same antiseptics in disease, *cæteris paribus*. Sternberg assigns to bichloride of mercury (mercuric bichloride) the first place as an antiseptic; yet he puts permanganate of potassium second. Whilst bichloride is effective in the proportion of 1 part in 20,000 of fluid, the permanganate of potassium acts to the same degree in the proportion of 1 part to 833 of solution. The bichloride is, therefore, about twenty-five times more efficient. We must acknowledge a certain sense of scepticism in examining these experiments of Dr. Sternberg, as able and well-considered as they unquestionably are. We find it difficult to understand why liquor zinci chloridi has no germicide action, whilst a 2 per cent. solution of the same is effective in the proportion of 1 part to 50. As the experiments of Dr. Miguel have been more recently performed, and the conditions insisted on by Jalan de la Croix more perfectly observed, we may rather accept his conclusions in regard to the real value of permanganate of potassium as a germicide.

As a deodorant, and so far a disinfectant, this agent has a large sphere of usefulness in medical practice. Sufficiently concentrated, it has an effect on the constitution of certain animal poisons. The fact first ascertained by Lacerda—that permanganate of potassium decomposes and renders harmless the poison of venomous snakes—seems to contradict the results of the experimental investigations regarding its germicide power. The destruction of the animal poison takes place on contact, but the same agent is completely inefficient when acting through the whole mass of the blood. It is, however, a question of the strength in which the permanganate is used. Topically, it is possible to make applications strong enough to decompose animal poisons without, at the same time, injuring the textures to which they are adherent.

In *gonorrhœa*, *leucorrhœa*, and *suppurating buboes*, a strong solution—five to ten grains to the ounce—is an efficient remedy. It has proved to be especially so in gonorrhœa. When the attack is recent, the solution should not be stronger than two grains to the ounce, but, the more chronic, the stronger the injection may be made, of course within reasonable limits. In suppurating buboes, the contents of the sac should be drawn off with an aspirator if still intact, or thoroughly evacuated if ruptured, and the cavity filled with the stronger solution mentioned above.

Lacerda's experience with permanganate in snake poison renders it almost certain that in the corresponding poison of syphilis the local application of this remedy at the earliest moment to an infecting chancre may be productive of the best results. In all forms of unhealthy and sloughing syphilitic sores—in sloughing phagedæna, for example—it deserves more extended use than has heretofore been made. Finely pulverized, it can be dusted thoroughly over

[1] Antiseptica und Bakterien. Archiv f. experimentelle. Pathologie und Pharmakologie. Band iv. p. 1.

[2] Archives de Physiologie normale et pathologique. Vol. 4, 3d series, p. 142.

[3] Bul. Gén. de Thérap. Vol. 107, p. 80 *et seq.*

[4] Das Verhalten der Bacterien das Fleisch-Wassers gegen einige Antiseptica. Archiv für experimentelle Pathologie und Pharmacologie. 1881. Pp. 175 and 225.

[1] Experiments to Determine the Germicide Value of Therapeutic Agents. By Geo. M. Sternberg, M.D., U. S. A. American Journal of Medical Sciences, April, 1883.

the diseased surface and introduced into all the sinuosities. By the same mode of application it can be used in *lupus* and *epithelioma*, and will, doubtless, be found more effective than the chlorate of potassium, which, applied in this way, has lately been much urged on the attention of the profession.

As a disinfectant and deodorant, a solution of two to five grains to the ounce is useful in *otorrhœa, ozæna, fetid breath, fetid sweat of the axilla and feet*, and in general wherever on the surface of the body there are odorous discharges and emanations. For general disinfectant purposes it is rather an expensive agent, even if equal to the active and cheaper agents now utilized for this purpose.

As has been already stated, permanganate of potassium is the most generally useful test for determining the presence and amount of organic matter in potable waters, a standardized solution being employed. It may, also, be used to free drinking water from dangerous impurities when the drinking of contaminated water may be imperative.

THE HYDROCHLORATE OF COCAINE AS AN ANÆSTHETIC IN EYE SURGERY.

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HAVING seen the favorable reports in THE MEDICAL NEWS of the use of this drug, I sent to Jno. Wyeth & Bro. for a sample for trial.

The friends of the patient for whom I had especially desired it hesitating about having the first trial made on her, I resolved first to test its effect on my own eye. Three drops in the conjunctival sac, at intervals of three minutes, at the end of ten minutes had rendered the conjunctiva so insensible that I could rub my finger over the sclerotic and cornea without the slightest disagreeable sensation, and taking a pair of sharp-toothed forceps, such as are used in the strabismus operation, I seized the conjunctiva of the ball and drew it off to a distance of one-eighth of an inch without the least pain. There was a slight reduction of the power of accommodation, and decided dilatation of the pupil.

On the following day, having explained the above experiment to the friends of my patient, and assured them of the harmlessness of the drug when used in this way, they gave their willing consent to its use, having a great dread of the effects of ether.

The following is a report of the case: Miss C. P., æt. 17, since the age of four or five years has had a high degree of convergent strabismus in the left eye, but which was at times interchangeable with the right. When about nine years old, Dr. Williams, of Boston, operated on the left eye, dividing the tendon of the internal rectus muscle, but the squint returned in a short time. On November 5th, after treatment with cocaine, I did a practically painless operation on each eye, dividing each internal rectus tendon freely.

The method of using the drug was as follows: At intervals of three minutes, for a quarter of an hour before operating on each eye, I dropped into the conjunctival sac one drop of a two per cent. solution of the hydrochlorate of cocaine. After the third dose had been used, the patient was astonished to find that she could pass her finger over the ball of the eye without any uncomfortable sensation whatever. During the progress of the operation, at intervals of about five minutes, a drop was instilled into the wound by an assistant. This was made necessary by the fact that, in this strength at least, the effect begins to wear off in from five to ten minutes. At one time, during the operation on the right eye, I had omitted to apply the drops for a few moments, and having made a fresh incision, the hook used in taking up the tendon caused a slight twinge of pain. A two per cent. aqueous solution was used. I shall, at my first opportunity, make use of a four per cent. solution, which I think will be still more effective.

The freedom from hemorrhage with the first incision was a noticeable feature of the case, though the incisions were quite free in both eyes; there was an entire absence of that extravasation of blood which often renders an eye so unsightly after a tedious operation for strabismus.

Though the patient—a rather nervous young lady—was somewhat overcome by the excitement and mental strain of an operation to which she had looked forward with dread for a long time, there were no unpleasant effects whatever which could be traced to the use of the drug, with the exception of the dilatation of the pupil and the slight effect on the accommodation which is produced by cocaine. This effect is similar to that produced by a very weak solution of atropia.

PRELIMINARY NOTE ON THE RELATION OF DERMATITIS HERPETIFORMIS TO HERPES GESTATIONIS AND OTHER SIMILAR FORMS OF DISEASE.[1]

By LOUIS A. DUHRING, M.D.,

PROFESSOR OF SKIN DISEASES IN THE UNIVERSITY OF PENNSYLVANIA.

IN my original communication on Dermatitis Herpetiformis,[2] the symptoms, characteristics, and the several varieties of the disease were described. It was also stated that the pustular variety was the same manifestation as that described by Hebra as impetigo herpetiformis. The view was likewise put forth that the herpes gestationis of authors was probably merely another variety of this affection. In a more recent paper, just read before this Association,[3] the relation of the impetigo herpetiformis of Hebra to dermatitis herpetiformis has been shown, and the conclusion reached that the former is but a variety of the latter disease. In the present note I desire to bring forwards supplementary views which have of late been forced upon me by study of the literature of the subject, to the effect that not only the herpes gestationis of writers, but also other similar forms of eruption reported with various titles are all merely instances of one process, namely, dermatitis herpetiformis as I have defined this disease.

[1] Read before the American Dermatological Association, 1884.

[2] Read before the Amer. Med. Assoc., May 6, 1884, and published in the Journ. of the Amer. Med. Assoc, August 30, 1884.

[3] Journ. of the Amer. Med. Assoc., Aug. 30, 1884.

To be more definite, some of these cases may be mentioned.

The "herpes circinatus bullosus" of Erasmus Wilson;[1] the "pemphigus prurigineux" of Hardy;[2] the "herpes gestationis" of Milton,[3] Bulkley,[4] Thompson,[5] Liveing,[6] Cottle,[7] Gale,[8] and W. G. Smith,[9] all represent manifestly the same disease, and are expressions of the vesicular and bullous varieties of dermatits herpetiformis. In like manner the "pemphigus" of Klein;[10] the "pemphigus circinatus," of Rayer;[11] the "herpes phlyctænodes" of Gibert;[12] the "pemphigus aigu pruriginosus" of Chausit,[13] and the "pemphigus composé" of Devergie.[14] Certain cases of so-called "hydroa," should, I think, also be viewed as forms of dermatitis herpetiformis, as, for example, the cases reported by Handfield Jones[15] and Bulkley,[16] and that of "Florence S.," described in the *British Medical Journal*, 1870. Likewise such cases as that of Oswald,[17] reported with the heading "a peculiar skin eruption occurring during pregnancy;" and of Leigh,[18] a "bullous eruption of a peculiar character."

The very unusual case of Jarisch,[19] designated "herpes iris," and the case of Meyer,[20] "a fatal pemphigus-like dermatitis," have also points in common with the disease under consideration.

Finally, without doubt some cases of so-called pemphigus, especially of "pemphigus pruriginosus," might more properly be regarded as examples of dermatitis herpetiformis.

HOSPITAL NOTES.

ST. MICHAEL'S HOSPITAL, NEWARK, N. J.

Service of DR. WILLIAM PIERSON.

REMOVAL OF EPULIS WEIGHING FIVE AND A HALF OUNCES, AND MEASURING TEN AND THREE-EIGHTHS INCHES IN CIRCUMFERENCE.

(Reported by A. C. DOUGHERTY, M.D., SURGICAL CLINICAL ASSISTANT.)

ON July 18, 1884, Dr. Pierson removed an epulis of the above mentioned rather unusual dimensions. The patient, a female, was a native of Ireland, forty-three years of age, and had first noticed the growth twelve years before, but it was only within the last four years that it has been large enough to distend the cheek, and for the last year that she had suffered any pain in the growth. The pain was intermittent, and sharp and darting in character. The tumor, which during the last six months had grown very rapidly, was attached by a small pedicle to the internal periosteum of the lower jaw on a level with the second molar tooth, greatly distending the cheek, and interfering with deglutition and articulation. For some time prior to the operation all nourishment had been of a fluid character,

The patient entered the hospital on July 17th, and on the following day the growth was removed, an incision three and one-eighth inches long being made along the lower border of the jaw, through which the tumor was enucleated, and its bony site well scraped. The edges of the wound were then brought together by a continuous catgut suture, and a dressing of iodoform applied; the wound healing almost by first intention. Up to date there has been no recurrence of the growth.

MEDICAL PROGRESS.

FATTY DIARRHŒA IN CHILDREN.—In a paper on the fatty diarrhœa of children, as understood by Demme and Biedert, ISCHERNOV has found, from an examination as to the amount of fat contained in the feces of healthy and fevered adults and children, that in fever at least 14 per cent. of the fatty food is absorbed. He then made analyses of the feces of children under six years of age, and under different circumstances.

In the feces of seven healthy children he found from 25 to 30 per cent. of fat; in that of two prematurely born children, 47 to 57 per cent.; in four children with dyspepsia, 37.6 per cent. (normal state, 26.3), 43.6 (normal 27), 43.5 (in this case the mother's milk contained only 1.5 per cent. of fat), and 62.2; examinations were also made in fourteen other cases, in which the children suffered from different diseases, and in whom there were symptoms of intestinal irritation.

In a case of erysipelas the fat amounted to 52.2 per cent.; catarrhal pneumonia, 51.1 per cent. (during convalescence, 42 per cent.), 51.7 (convalescence, 33), and 60.9 (convalescence, 55.2); in a case of large abscess, 67 per cent. of fat, which fell to 48.3 when the abscess was opened and improvement began. In a case of icterus, with enlargement of the liver and spleen and severe diarrhœa, there was 75.3 per cent. of fat.

Ischernov concludes there is no such disease as fatty diarrhœa, but that it is a symptom found in various and widely different diseases.—*Centralbl. für klin. Med.*, September 27, 1884.

FRACTURE OF THE PENIS.—DR. H. A. VEAZIE, of New Orleans, reports the case of a young man who fractured his penis during the act of coition. On examination, it was found that the penis had been broken through and through, except the cutaneous covering. The two fragments could be moved upon each other, and on making traction a distinct sulcus could be felt at the seat of the break, which was about an inch and a half back of the corona. The urethral spongy body and the corpora cavernosa all evidently broken through.

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[1] Diseases of the Skin. Sixth ed. London, 1867.
[2] Leçons sur les Mal. de la Peau. 2d part, p. 136. 2d ed. Paris, 1863.
[3] Path. and Treat. of Diseases of the Skin. London, 1872. Page 205.
[4] Amer. Journ. of Obstetrics, February, 1874.
[5] Archives of Derm., October, 1875.
[6] Lancet, June 1, 1878, p. 783.
[7] St. George Hosp. Rep., 1879.
[8] Lancet, 1880, vol. i. p. 601.
[9] Dublin Journ. Med. Sci., 1881, 3 s., lxxi. p. 70.
[10] Allg. Wien. med. Zeitung, August, 1867; quoted in Journ. Cutan. Med., July, 1868, p. 203.
[11] Treatise on Diseases of the Skin. English translation. London, 1835, p. 219.
[12] A Practical Treatise on the Special Diseases of the Skin. English translation. London, 1845, p. 118.
[13] Annales des Maladies de la peau et de Syph. March, 1852.
[14] Mal. de la Peau, p. 309. Paris, 1857.
[15] Med. Times and Gaz., September 6, 1873.
[16] Archives of Derm., April, 1877.
[17] Lancet, June 10, 1882, p. 951.
[18] Lancet, January 6, 1883, p. 11.
[19] Viertlj. für Derm. u. Syph. 2 u. 3 Heft., p. 195, 1880.
[20] Archiv für path. Anat. u. Phys. November, 1883, p. 185,

His urine was drawn off, quinine and opium given, and incisions made through the skin to give exit to the extravasated urine. The next day he had high fever and severe rigors. Sloughing occurred in patches, none larger than a half-dollar piece. A disinfectant lotion of liq. sodæ chlorinat. was applied to the penis, and he was instructed to draw his urine with a catheter when necessary. He made a good recovery, all openings healed well, but the distal fragment did not become erect until six months after the accident. The organ finally recovered its former usefulness. This was a case evidently of fracture of the healthy penis, there having been no disease of that organ up to the time of the accident.—*New Orleans Med. and Surg. Journal*, October, 1884.

PORRO OPERATION.—FREY reports a case of Cæsarean operation by the Porro method, performed in December, 1882. The patient was 42 years of age, had Bright's disease, and her pelvis was markedly deformed from osteomalacia. The child was dead (!) when extracted. The woman died 76 days after the operation, with nephritic symptoms.—*Centralb. für Gynäk.*, Oct. 18, 1884.

NEPHRECTOMY IN AN INFANT.—At the meeting of the Clinical Society of London, on October 24, MR. R. J. GODLEE reported the case of a boy, aged one year and ten months, who had a tumor on the right side, which measured four inches by about two, and was growing rapidly. It was freely movable, and manipulation caused no pain. There were no urinary symptoms at all. The kidney was removed by the lateral abdominal (Langenbuch's) incision, and was readily accomplished as there were no adhesions to surrounding structures. The cæcum and the duodenum were the only pieces of bowel exposed. One large vein which ran over the tumor alone required ligature. There was no hemorrhage of consequence, and the whole operation was concluded in half an hour. The child had no symptoms of any kind after the operation. It ate and slept as well the next day as before, and the temperature only rose to 99° once, the day after the operation. It left the hospital well six days later. It continued well for six months, when recurrence took place in the right iliac fossa, the tumor rapidly increased in size, passing down into the scrotum, and the child died soon after. Mr. Godlee mentioned eight other cases which had been recorded, showing that five of them had died of the immediate result of the operation, two had recovered well, but died afterwards of a recurrence, and one was well when last heard of, but notwithstanding the unsatisfactory nature of the results, he argued that, seeing how hopeless the condition is if left alone, we should endeavor to remove these tumors in a still earlier stage, at all events until it is proved that even this proceeding is invariably followed by a fatal result. He particularly, however, pleaded against attempting the removal of the very large growths which are not infrequently met with, showing that they will almost certainly have involved surrounding structures, and that thus while no good can follow the operation an immediately fatal result is probable. The tumor weighed about one pound, and was in structure a mixed sarcoma, most of the cells being roundish or oval, but some spindle-shaped. This is probably the usual composition of these growths, but another class was mentioned in which striped muscular fibres occur. The latter are probably congenital, and often affect both kidneys, and are thus not favorable for surgical interference.—*Medical Times and Gazette*, November 1, 1884.

ŒSOPHAGEAL AUSCULTATION IN THE DIAGNOSIS OF THORACIC DISEASE.—DR. BARÉTY, in a recent paper on this subject, calls attention to the primary results of his studies in auscultation of the œsophagus as an additional means of diagnosis in thoracic diseases. By the application of the stethoscope on each side of the spine, between the scapulæ, a gurgling sound is heard during deglutition in the normal state; the sound being slightly more marked on the left side. Baréty has studied this sound as regards intensity, pitch, and quality, and its modifications in the presence of morbid conditions of the thorax. These studies are as yet necessarily incomplete, but so far as they lead to the conclusion that there is an increase of intensity in conditions of intrathoracic solidification at and near the region auscultated, among which he calls particular attention to tuberculous induration and engorgement of the tracheal and bronchial glands. He finds that the pitch is generally, almost always in fact, affected in cases of pleural effusion. It may also be said, in a general way, that the pathological significance of the modifications caused in the sounds of deglutition is the same as that of the modifications ordinarily found in respiratory sounds. In a later paper he will give the results of his studies of the œsophageal sounds as modified in pneumonia, bronchial dilatation, pulmonary cirrhosis, emphysema, pneumothorax, and hydropneumothorax, cancer, hydatids, cavities, etc.—*Revue de Méd.*, August, 1884.

A SYMPTOM OF INFLAMMATION OF THE PIA MATER.—KERNIG reports that, in examining 15 cases of inflammation of the pia mater, of which 13 were cases of epidemic cerebro-spinal meningitis, 1 of tuberculous meningitis, and 1 of purulent meningitis, he found that if the patient was placed in a sitting posture a contraction of the flexor tendons of the knee-joint was observed; in the severe cases it was so pronounced that the contraction could only be overcome by considerable force. For the occurrence of this contraction it seems to be necessary that the thigh should be flexed to a right angle, as the symptom is not observable in the upright position. This phenomenon is present at the beginning of the disease, and persists during its entire period; in convalescents it lasts for some time after they get out.—*Centralbl. für klin. Med.*, September 27, 1884.

THE INFUSION OF SALT-SOLUTION.—DR. FUX, of Laiboch, reports the case of a young man, twenty-one years of age, who stuck a thorn into his left hand. The wound did not heal, and gangrene set in, with profuse hemorrhage from the affected part. The gangrenous portion was removed, but the patient became so exhausted from the parenchymatous hemorrhage that he was in the most desperate condition. Fux injected about f℥vijss of a six per cent. solution of common salt into a vein of the right arm, by means of an irrigator. There was an immediate improvement in the patient's condition, and he recovered in a satisfactory manner.—*Centralbl. für klin. Med.*, September 27, 1884.

THE MEDICAL NEWS.

A WEEKLY JOURNAL

OF MEDICAL SCIENCE.

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SATURDAY, NOVEMBER 22, 1884.

THE CHOLERA, AND ARE WE PREPARED FOR IT?

THE appearance of cholera in Paris, in epidemic form, and its reported "sporadic" occurrence in London, bring us almost face to face with this unwelcome visitor. In former numbers of THE MEDICAL NEWS we have outlined the progress of the disease abroad, and what means should be adopted in our own country to prevent its introduction or mitigate its severity, should it obtain a foothold.

The proclamation of the President in July last, the almost daily bulletins in our medical journals and newspapers, the action of local and State boards of health, have all been calculated to arouse the most indifferent to a realizing sense of the impending danger, yet with all this we have heard of no movement in the direction of being practically prepared for the disease. Quarantine inspections, sanitation, etc., are all well enough, but in case the disease reaches our shores, what actual preparation has been made in our large cities for the care of the sick poor, for their removal to hospitals, or, in fact, for hospitals in which to put them? What arrangements are on foot for the speedy depopulation of an infected district, its purification, and the care of the population removed from it? We do not wish to alarm our readers, but these are practical questions, and although the disease may not reach us before next spring, it must be remembered that more than one epidemic of cholera obtained a lodgement in the United States during the winter months, notwithstanding a vigilant quarantine and the adoption of sanitary precautions.

With cholera so near—at Paris and London—it is possible for it to reach us at any moment, and an organized corps of medical men, with experienced nurses engaged, hospitals prepared, and all the details provided for, would simplify the work, and do much toward staying the disease and avoiding a panic. Let these means be provided without delay, to be called into active use if found necessary; and, if we happily escape the visitation of cholera, the expense incurred will be a trifle compared with what it might have been had the disease appeared and found us unprepared to meet it.

There is no estimating the quieting effect upon the public mind which would follow the announcement by our health officers that every arrangement had been made for meeting the disease, and, in case it comes, the facilities for managing it being already at hand, no unnecessary confusion or panic would follow.

ACUTE SUPPURATIVE SYNOVITIS OF CHILDREN.

IN his *Beiträgen zur Chirurgie*, Volkmann, of Halle, refers to a peculiar inflammation of the joints of young children, which he calls acute catarrhal suppuration, on account of the nature of the secretion furnished by the superficially inflamed synovial membrane. This, in well-marked cases, is mucoid pus, or pus mixed with synovial fluid.

In a paper contributed to the *Berliner klinische Wochenschrift*, No. 43, 1884, DR. KRAUSE, the assistant of Volkmann, narrates two cases from his own practice, and furnishes the only full description of the affection of which we have any knowledge. Indeed, we fail to find any notice of it in our surgical text-books or monographs on the diseases of the joints, so that he practically calls attention to a new disease.

Acute suppurative inflammation of the synovial membrane of the larger articulations of children is almost invariably met with prior to the fourth year. Of its causation nothing is known. It is not preceded by the acute exanthemata, typhus, dysentery, diphtheria, epidemic parotitis, or other disorders which not infrequently terminate in suppuration of the joints, nor has it anything in common with monarticular rheumatism, tuberculosis, epiphyseal osteomyelitis, or syphilis. It is of comparatively frequent occurrence, Volkmann having seen at least fifty cases.

The clinical history of a typical case is as follows: A healthy child, without any antecedent illness or history of injury, is suddenly seized with fever and painful inflammation of the knee, shoulder, ankle, elbow, or hip-joint, the articulation most frequently affected being in the order here stated. The joint rapidly fills with fluid, the superficial tissues become swollen, red, and hot, and in a few days spontaneous or artificial evacuation gives vent either to a clear

mucoid fluid streaked with thick, yellow pus, or to mucoid pus. If the joint has been laid widely open, the synovial membrane is seen to be much swollen and the seat of a vivid red discoloration, while the cartilages and other structures are free from disease.

In the majority of instances the affection pursues an extremely favorable course. Even in preantiseptic days, recovery after early puncture or spontaneous opening, with little or no impairment of function, was the rule. In some cases in which evacuation is long delayed, the cartilages show signs of involvement, and partial ankylosis, deviations in the form of the joint, and incomplete or total luxations ensue. In many cases, Volkmann, after incising the hip-joint, has succeeded in reducing the dislocation, and the results were excellent.

The treatment consists in free opening of the joint with the strict observance of antiseptic precautions, under which recovery, almost without exception, may be looked for.

In both of his cases, Krause found micrococci arranged in chains in the pus derived from the joints. They resembled, in every respect, the pyogenic micrococci described by Rosenbach. Cultivated in proper media, and inserted into the cornea or the jugular vein of dogs and guinea-pigs, they produced no effect whatever upon the articulations. These failures do not, however, preclude the probability of their being the cause of the disease in the human subject, since, as is well known, the effects of micrococci on man and the lower animals are by no means always similar.

THE NEW YORK STATE MEDICAL ASSOCIATION.

THE first annual meeting of this Association unquestionably marks an important event in the history of medicine in the United States. For it is no small circumstance that so large and influential a proportion of the medical profession of the State of New York should feel themselves obliged to organize a new State Society for reasons which are well understood, and with which the profession of the whole country sympathize. The roll of membership of the new society includes many of the most distinguished physicians and surgeons in the State, and the papers and the discussions on them at the meeting just held, have never been surpassed in interest and value on any similar occasion. The successful issue of the meeting is no more than was to be expected. Possessing, as the new Association does, the sympathy of the profession, and the right of representation in the American Medical Association, it must largely sap the interest felt in the old State Society.

We congratulate the New York State Medical Association and its Committee of Arrangements upon the great success which has attended this first meeting.

DR. THOMAS'S ADDRESS.

THE address in obstetrics and gynecology delivered on Wednesday morning by Dr. GAILLARD THOMAS is presented to our readers in this number of THE NEWS. It certainly augurs well for the future of the Association, that such an address has been delivered before it. Though recognizing its great value, we can not agree with all the statements it contains. Thus, when we are told that obstetrics "existed as a very perfect art," even at the time of Smellie and Levret, we beg leave to dissent—nay, it is not a perfect art now, still less "a very perfect one." So, too, we question whether obstetric scholars will give William Hunter such high praise as does Dr. Thomas. Hunter made important contributions to the physiology of pregnancy and of labor; but it seems to us an extravagance to assert that he elevated obstetrics to the "high sphere of a science." More was accomplished upon the continent in such elevation than in Great Britain; the mechanism of labor is quite as necessary for scientific obstetrics as the study of its physiological phenomena, and there were some most dangerous errors inculcated by Hunter in his practical obstetrics, while his anatomy was sometimes at fault.

The subject of bacteria is referred to, and the importance of antiseptic precautions in obstetric and in gynecological practice urged; and a brief summary of the treatment advised by Dr. Thomas for puerperal septicæmia is given.

In the earlier months of extrauterine pregnancy, the author advocates the use of electricity to destroy the life of the fœtus, remarking, "This method is harmless to the mother, even if an incorrect diagnosis be made, and effectual in producing fœtal death if the diagnosis be correct." But he fails to say that the fœtus may be thus killed in a normal pregnancy; indeed, it is probable that this has happened more than once in cases of supposed ectopic gestation. The induction of premature labor in placenta prævia and in puerperal nephritis is advocated; but the profession in general seems slow to accept these indications for arresting pregnancy.

In referring to the obstetric forceps, Dr. Thomas states that the only real improvement made in the instrument since the days of Smellie and Levret is that of Tarnier; this certainly is very high praise to the recent invention of the great Paris obstetrician, nevertheless it will probably be called just by every one who has not himself invented a forceps, or who does not follow Pajot in his rejection of Tarnier's instrument.

Laparo-elytrotomy is accorded just praise; a new case, in which both mother and child were saved, is adduced to enforce the value of the operation.

The gynecological portion of the address refers to Emmet's operation for tears in the neck of the womb, extirpation of the ovaries for the several purposes advised by Battey, Hegar, and Tait, vaginal extirpation of the cancerous uterus, and abrupt dilatation in the treatment of uterine flexions. Finally, four drugs are mentioned as of value in gynecology, or in obstetrics, the space given to these being about one-twentieth of the entire address, rather a poor showing for the medical branch of this department. The question naturally presents itself to us, Is there not danger of the profession unduly exalting the operative part of obstetrics and gynecology when one of the most brilliant of American teachers, and one of the most successful of operators, devotes almost all the time of such an address to operations, obstetric or gynecological? Even adding to the space occupied by a very brief reference to the four drugs, "which have of late been introduced into practice," that in which the prevention and treatment of puerperal septicemia are considered, there does seem to us undue prominence given to the purely surgical aspects of that department of medicine in which Dr. Thomas has won such enviable fame.

TUBERCULAR ENDOBRONCHITIS AND PERIBRONCHITIS.

A LARGE number of pathologists having accepted the view that the bacillus is the primary etiological factor in tuberculosis, attention is again being turned to the histogenesis of the process. Among others, v. SCHROEN has recently devoted himself to this phase of the question, and reported the results of his studies to the Congress of Naturalists and Physicians at Magdeburg. Seated in the finest bronchioles, the first stage is associated with the presence of small spores which, later, give place to bacilli contained in numerous giant cells. The process is accompanied by a coagulable albuminous exudate, to which he prefers to apply the old term "blastema," although he is careful to disassociate from it the corresponding notion of a free cell formation. He considers it rather the result of a disintegration of the white corpuscles which have wandered out into the bronchi, since he was unable to discover in them either a true fission or endogenous cell formation. The giant cells are thought to arise from certain very small endothelial cells, much smaller than emigrant blood cells, present in the blastema. The giant cells accumulate in such quantities as to cause obstruction of the bronchioles, followed by atelectasis of the terminal vesicular structure pertaining to them, catarrhal pneumonia, emigration of colorless cells, epithelial desquamation, and gradual transition into cheesy pneumonia and coagulation-necrosis.

As to the method in which the tubercles are formed, v. Schroen tells us that flask-like projections of the epithelium form in the wall of the diseased bronchiole, forming niches into which the giant cells wander or are perhaps forced. Each of these niches, in the centre of which the giant cells lie, afterwards becomes, if it is constricted off from the epithelial matrix, the middle point of a tubercle, while the thickening of the peribronchial connective tissue continues to increase, and results in cheesy tubercular peribronchitis. The gradual transformation into tubercle of the mass of giant cells which pass beyond the stage of blastema and giant-celled thrombus, exhibits an endothelial, fibromatous, and finally hyaline phase. Especially interesting, says v. Schroen, is the moment at which the connective tissue, forcing its way through the bronchiole wall, breaks through the latter and a mixture of giant cells with the young connective tissue occurs, out of which spring numerous endothelial cells. The more the connective tissue increases, the more do the giant cells diminish in number and size, while the blood supply is increased by the formation of new bloodvessels.

While a part of the giant cells is used up in tubercle formation in the bronchiole, and another part appear in the bronchial outgrowths and becomes the starting-point of a peribronchial tuberculosis, a third portion is forced through the infundibula into the lung alveoli and produces a rapidly coagulating exudation very poor in cells, which closely resembles the contents of a large lymphatic vessel in color and structure. Very frequently large numbers of white corpuscles wander into these lobular foci, and at the same time there begins a reaction of the alveolar epithelium, thereby introducing the phenomena of cheesy pneumonia and its consequent coagulation-necrosis.

TREATMENT OF TYPHOID FEVER.

THE recent paper of PROF. EBSTEIN, before the Congress of German Naturalists and Physicians, may, perhaps, be regarded as the mirror of the treatment at present accepted in Germany, and is, therefore, likely to prove of interest to our readers. The paper is based upon 235 cases, either severe or moderately severe. The mortality was 5½ per cent., which is reducible to 2½ per cent. by the elimination of cases irremediable by any treatment.

The abortive treatment by calomel is still regarded with favor, and this is the only treatment which can be considered etiological or causal. For the rest, the treatment must be symptomatic. Especial stress is laid upon dietetic and restorative measures, through the latter of which the patient is to be protected from the threatening inanition so characteristic of this disease.

Long-continued high temperature is to be especially combated only when associated with serious nervous or cardiac symptoms, or both, or when the temperature is so high as to threaten life. Baths, which are also to be regarded as stimulating, are approved of for the purpose, but are recommended only when other measures prove insufficient. Among other remedies, the preparations of salicylic acid are used for the purpose of temperature reduction, and Ebstein considers their use unattended with danger to the muscular structure of the heart.

Except that the calomel treatment is regarded with some favor, it will be noted that the experience with this large number of cases leads to much the same results as have been reached elsewhere—the sum of which is, that there is no specific treatment for typhoid fever, and that our skill and success are commensurate with the judgment shown in the combating of such symptoms as arise in the course of the disease.

REVIEWS.

THE NATIONAL DISPENSATORY. By ALFRED STILLÉ, M.D., LL.D., Professor Emeritus of the Theory and Practice of Medicine, and of Clinical Medicine in the University of Pennsylvania; and JOHN M. MAISCH, Ph. D. Professor of Materia Medica and Botany in the Philadelphia College of Pharmacy. Third edition, thoroughly revised, with numerous additions. With 311 illustrations. Imp. 8vo. pp. 1755. Philadelphia: Henry C. Lea's Son & Co., 1884.

THE National Dispensatory was published early in 1879. A second edition has been sold since that date. Now a third edition claims attention. It is in every respect creditable to its authors and publishers. Indeed, we have yet no knowledge of a Dispensatory in any language that is more complete and worthy of confidence. It contains a full summary of the state of materia medica, pharmacy, and therapeutics, at the date of publication. Every source of information, foreign and domestic, in recently published works and current periodicals, has been consulted and employed in the compilation with that rare discrimination which inures only to very extensive learning, long experience, unremitting industry, and habitual accuracy,—qualifications possessed in a high degree by both authors.

To obviate a practical inconvenience arising from the constituents of formulas in the last revision of the Pharmacopœia of the United States being stated in "parts by weight," these have been translated and expressed in definite weights and measures of the apothecary. Formulas from the British and German pharmacopœias and the French Codex are also given. Besides a very full general index to the work, there is an admirable therapeutic index which physicians may find suggestive, and, in this sense, very useful.

As an entirely reliable and satisfactory standard we take pleasure in commending the National Dispensatory.

SOCIETY PROCEEDINGS.

CINCINNATI ACADEMY OF MEDICINE.

Stated Meeting, November 3, 1884.

(Specially reported for THE MEDICAL NEWS.)

THE PRESIDENT, W. H. WENNING, M.D., IN THE CHAIR.

CANCER OF THE STOMACH; GASTROSTOMY; GASTRO-ENTEROSTOMY.

DR. J. T. WHITTAKER opened the discussion of this subject with the report of the following case: A little more than a week ago he was called to the country to see a young man aged thirty-three, who for eleven years had suffered from symptoms of gastro-intestinal catarrh, such as eructations, gastric distress, and vomiting. The dyspepsia had been exceedingly obstinate. The patient had been to this city and had here consulted several physicians, and had later gone to New York, where he got the opinion of another physician, which differed entirely from the opinion of those who had seen him here, as theirs had differed from each other, a fact which showed the obscurity of his case at that time. During his stay in New York, and after his return, he ran down rapidly. Dr. Whittaker found him exceedingly emaciated, so much so indeed that he thought at first sight that he had before him a case of tuberculosis. He was unable to stand without support, and he had marked œdema about the ankles. His intellect was clear, and on examination of the heart and lungs these organs were found in a state of health.

Upon examination of the stomach, to which attention was next directed, it was very easy to map out the organ, and on account of the extreme emaciation it was an easy matter to examine all the contents of the abdomen. The stomach made a tumor which was exceedingly tympanitic on superficial, but dull on deep percussion, and fluctuated on pressure. The centre of the tumor was about on a level with the umbilicus. There was also, upon direct pressure from before backward, a pulsation—not an expansive pulsation, but plainly a pulsation which was transmitted from the aorta beneath. The diagnosis at this stage seemed to rest between carcinoma and gastric ulcer. The age of the patient seemed to exclude carcinoma and to point rather to ulcer. But there had been no vomiting of blood. There had been pain, especially after eating, but the individual by restricting his diet had been able in a great measure to relieve that symptom. There was in this case none of the characteristic pain of ulcer. He had, therefore, but one opinion, and that was that it was a case of carcinoma, but he could find no tumor. On account of the distention of the stomach, he concluded that there must be occlusion of the pylorus, and therefore directed his examination especially to that region. For the last week there had been, evidently on account of weakness, but little vomiting, and he therefore considered the fluctuation due to the retained fluids that had been taken into the stomach and retained there. He had suggested the introduction of the stomach-tube, but this was objected to on the part of both patient and friends, and on account of the extremely feeble condition of the patient he feared to insist upon the procedure. The patient was then taken

from bed and placed in a chair. His knees were bent and raised so as to flex the thighs upon the abdomen and the legs upon the thighs, and in that position he was able to detect an induration about the size of a walnut in the region of the pylorus. This examination was several times repeated, with each time the same result. The diagnosis of cancer of the stomach was therefore made and announced to the friends of the patient.

He had been reluctant to make this diagnosis for two reasons. In the first place, it had been made by none of the other physicians who had seen the case, and, in the second place, because of its prognosis. When the diagnosis of cancer was announced, members of the family were not willing to accept it, and he advised them to act upon the opinion of others, since this alone offered them any hope of recovery. The patient died, however, rather suddenly about two days afterward. No post-mortem examination was permitted.

There was strong evidence of carcinoma, the speaker said. The patient had nausea coming soon after eating, and a few minutes after he would reject his food. There was the pain, not severe, but constant, which had persisted until a short time before his death. Then there was the fluctuation; and finally, there was the tumor, to be made out upon placing the patient in a certain position. Against this diagnosis, on the other hand, was the absence of vomiting of blood, and the age of the patient; he was only thirty-three, making him only about twenty-two when his first symptoms began. Everyone is aware, he said, that cancer is a disease of advanced life, coming on between thirty, forty, and seventy, but in looking up the statistics he had been able to find reported a great many cases in which it had occurred in early life. Cases of even congenital cancer have been seen. Wilkinson has reported a case of congenital cancer, and Wiederhoffer has seen several such cases. Reichert reports three per cent. of his cases as occurring between the ages of twenty and thirty.

The point of greatest interest in a case of carcinoma, he added, is the etiology; but this is, unfortunately, a point on which we are greatly in the dark. It has been conclusively demonstrated that it begins only in epithelial structures, and these we find everywhere in the body. The point that is now agitated is whether it may not result from simple gastric catarrh. There are some parts of the earth in which cancer is almost never seen, and there are others in which it prevails almost to an epidemic extent. For example, in Egypt, Turkey, and in Vera Cruz, cancer of the stomach is almost never seen, and yet gastric catarrh is of extremely frequent occurrence. In Normandy, Upper Swabia, the Black Forest, and about Lake Constance, on the other hand, cancer is very common, and it has been attributed by Autenrieth and Clicquot to the abuse of vegetable food and cider. Virchow maintains that he has demonstrated every stage of the transition from catarrh to cancer. There is very great importance in an observation like this if it be true, for we can cure a case of gastric catarrh, and thus prevent a case of cancer.

The difficulty in diagnosis in these cases was well illustrated in the case reported. Between a case of gastric catarrh and a case of carcinoma without a tumor, the diagnosis is always one of the most difficult in medicine. The physicians who had examined the case could not detect the tumor, and he said he would not have been able to detect if he had not gotten the patient into the position he did. He had seen a case last winter with Dr. Ransohoff in which the symptoms of carcinoma were well marked, but in which it was impossible to discover the tumor. There was marked occlusion of the pylyrus, with gastrectasis, but no tumor could be felt, although the patient was equally emaciated. When an incision was made, and the pylorus exposed, it was found to be very much thickened, completely occluded, but the thickening was so situated that it was plainly impossible to feel it from the outside. It was behind the liver, and, of course, behind the ribs, and it had not, from its adhesions, been allowed to fall down by gravity, so as to be felt below the ribs. No one could have recognized the tumor in that case. Maurizio says that he has sometimes been able to recognize the tumor by putting the patient in the knee-elbow position, when he could find it in no other way. The speaker said further that he had seen once in the clinic of Frerichs a case in which fluctuation could be felt, and in which the stomach-tumor extended down and lay above the symphysis pubis. The clinician administered first a teaspoonful of tartaric acid, then a spoonful of bicarbonate of soda, and in that way, by the visible peristalsis, mapped out the boundaries of the stomach. Frerichs was the first to recommend this method, and many a physician since has been able to recognize the tumor with it where he could not do so otherwise. In the case just reported, however, he had not taken advantage of this method, but had been able to obtain the same result by putting the patient in the position which he had described. Sometimes in these cases a sense of increased resistance upon palpation of the stomach is all he can detect. It is not always an easy matter to recognize an increased sense of resistance in this region, but if we do discover it, and if it be located in the right side of the epigastric region, and if it be persistent, we are justified in suspecting a carcinoma. Carcinoma occurs in the stomach more frequently than in any other organ. It is found, we are told, in two per cent. of all autopsies, but very often it is entirely overlooked. That accident to the physician is more likely to occur when the disease is diffused along the anterior wall of the stomach. Again, the tumor may be so plain that a mere glance reveals it. Only last week an individual had consulted the speaker for stomach trouble, in whom he found an immense tumor in the region of the stomach. Again, when there is a constriction of the pylorus, the speaker said, the diagnosis is usually easy, because such a constriction is, in ninety-nine cases out of a hundred, due to cancer. The constriction reveals itself very quickly by the dilatation of the stomach which must supervene.

In concluding his report, he said that he had brought this case before the Academy because it was the first time that he had been able to recognize the tumor simply by changing the position of the patient. He had tried in vain to locate it in every position of the patient in bed. He would have made the diagnosis of cancer even if he had not found the tumor, on account of the great gastrectasis, but the detection of the hard nodular mass at once eliminated gastric ulcer and catarrh.

Cancer not infrequently develops about the cicatrix

of a gastric ulcer, but the speaker had always been incredulous concerning the cases of catarrh said to have been attended with such proliferation of the submucous connective tissue as to result in nearly complete occlusion. He believes these cases to be real carcinomata. As to the change from a catarrhal to a carcinomatous process, the speaker believed in it. While cases are recorded in which no catarrhal symptoms had been remarked, they were very rare, and his own experience was illustrated by this patient, who had had so-called dyspepsia off and on for years. This view gave us at least a new hope and a new chance in an affection considered the most fatal of all chronic disease.

DR. P. S. CONNER said that rather than add anything to what had been said, he would present a specimen which illustrated what might be found at a late period in cancer of the stomach. He had been much interested in the idea to which the last speaker referred, namely, that so many of these cases seemed to be the result of a long-continued inflammatory condition. Only a few days ago he had read the report of several cases in which the author held that all carcinomata, whether of the stomach or elsewhere, were strong evidence of a preëxisting catarrhal inflammation. It is certainly true, not only that there is a strong disposition to refer these carcinomata to a preëxisting inflammation, but the last speaker might have gone further, and said that there is a tendency on the part of many to go back to the old view, that all tumors are of inflammatory origin. We can understand how a catarrhal inflammation like this should give rise to this condition.

About two weeks ago, he had been called to see a gentleman from a distance, who had been very properly told by his physicians that he had a cancer of the stomach, but being dissatisfied, came to the city, and consulted several surgeons, among them himself. On examination, there was discovered a tumor the size of a closed fist, occupying a position a little above the umbilicus. The man was so much emaciated that the tumor was readily discoverable. The patient reported that he had for fourteen years suffered from dyspeptic symptoms, not being for any length of time free from them.

The specimen exhibited was one which he had removed by operation—so far as he knew, the first case in which the entire stomach had been removed on this side of the Atlantic. Two cases have since been reported. In this case, the patient was extremely emaciated, and almost *inarticulo mortis* when the operation was undertaken,—undertaken not because of any hope he had for relief from the trouble, but because the patient begged him to give her what relief he could. The specimen was entirely detached with the exception of a small point at the end, when he was informed that the patient was dying. The woman was between fifty and sixty years of age, and the speaker had never seen a carcinoma in a very young individual, or at anything like the age of the cases reported by Dr. Whittaker.

As for the propriety of operative procedures in these cases, leaving out of consideration all operations for non-malignant disease, or for sarcoma, he questioned very much whether the operations that have been made, or those that may be made, are of any real value whatsoever. As a rule, they are of more benefit to the operator than to the operated. There are cases in which relief has been given for a time, but still he questioned whether this would be secured as a rule, and particularly was he of this opinion when he considered the fact that, in this country, the patients have an opinion of their own, independent of the opinion of their physician, and will not submit to any operative procedure until the disease has gone on to the last stage, and until it is a question of only a few days whether the case shall be turned over to the undertaker or to the surgeon. As for his own feelings, he was willing to perform the operation and give the patient what chance there was for even temporary relief, but he would not do so without telling the patient that he must take all the chances, and informing him that the danger was very great. He was further of the opinion that it might be better, instead of performing an exsection, to form an adhesion between a healthy portion of the stomach wall and a knuckle of the intestine below. The patient would be more comfortable for awhile, and with the opening he would hardly die of starvation, for he would have a digestive tract, and the portion cut off would be of comparatively little importance.

This specimen exhibited had been kept many months in alcohol, but it still showed the immensely thickened condition of the walls, as seen by an incision through them. Often the great difficulty in these cases is undoubtedly that we do not recognize the existence of the disease until it is so far advanced that surgical interference really merits the appellation, "surgical audacity." The subject of the removal of non-malignant tumors is an entirely different one, for in them if the operation can be performed the lease of life is a comparatively long one, whereas in the malignant growths it is necessarily short. He had hoped in his case to be able to get the cardiac end of the stomach attached to some portion of the intestinal tract, he did not care much where, so that the fluids poured out in the upper part of the small intestine might flow down to meet the food and cause digestion in the part of the intestine where they came together. The operation he considered perfectly feasible, so far as operative procedures are concerned; and he was sure that, had his patient been in a fair condition, he could have made this operation without much difficulty.

DR. JOSEPH RANSOHOFF observed that the case with which Dr. Whittaker had connected his name was one of exceptional interest. The patient was only thirty-four years old, and had enjoyed excellent health to within one year of his death. Gastric symptoms had supervened with increasing severity up to the time of his admission to the hospital. The most marked subjective symptom was vomiting, which could not in any way be controlled. The pain was of only moderate severity and usually ceased when the stomach was empty. When the patient entered the hospital he was already extremely emaciated. Physical examination revealed nothing but the dilated stomach, which could, when filled with fluid, be felt as a fluctuating ("*Schwappen-gefühl*") mass, occupying most of the upper portion of the abdomen. Repeated examinations in varying postures failed to elicit the presence of a tumor, or even of an increased resistance in the epigastrium. For this reason the diagnosis of benign stricture of the pylorus, with or without ulceration, was made, while the presence of malignant disease could not be positively

excluded. As a *dernier ressort*, frequent washing of the stomach was resorted to for about a week in the hope that this remedy, which is of so much service in catarrhal conditions of this viscus, might be of some service. The hopes entertained from it were not realized. The vomiting continued unabated and the strength of the patient visibly diminished. For this reason a laparotomy was determined upon with the view of excising the pylorus.

Operation, April 12. Previous to the operation the stomach was freely washed out. When the peritoneal cavity was opened by the oblique incision recommended by Billroth, the distended stomach was at once encountered, and, when drawn down, presented at the pylorus a very characteristic malignant deposit. This involved the entire circumference of the pylorus and measured along its lower margin not more than an inch and a half, whereas along its upper margin it involved the lesser curvature of the stomach; the tumor measured here about two inches in length. A nodule about the size of a small pecan nut could be felt in the lesser omentum. The tumor was completely hidden beneath the inferior surface of the liver. It would have been an easy matter to excise this tumor, but the experience of one of the previous speakers was fresh in his mind. Our patient, already extremely weak before the first incision was made, was evidently failing fast. It was determined, therefore, to give up the excision of the stomach and to establish an aperture between the stomach and a loop of the small intestine.

Little difficulty was encountered in seizing a loop of the intestine, about eight or ten inches from the extremity of the duodenum. The length of the mesentery of this portion of the jejunum readily permits the approximation of the loop seized to any portion of the gastric surface. The intestinal loop was brought to the anterior wall of the stomach and fastened to it by eight Lembert's sutures, arranged in a semicircle, the diameter of which was about two inches. Then the blades of a long forceps, covered with soft rubber, were applied to the stomach and intestine to prevent the possible entrance of foreign matter into the peritoneum. Incisions, an inch and a half in length, were then made in corresponding parts of the gastric and intestinal walls. The perfect approximation of the apertures was easily accomplished by nine sutures arranged in a semicircle, the ends of which touched those of the half-circle previously mentioned. In order further to insure immunity of the peritoneum from contact with intestinal contents, an entire circle of sutures was applied. No drainage-tube was inserted into the abdominal wound.

The patient survived the completion of the operation eight hours. In the opinion of Dr. Whittaker and the speaker, death must have resulted in the natural course of the malady in not more than one week. The speaker believed that, if the operation had been practised one or two months sooner, the chances of temporary improvement would have been vastly greater. In two cases life had been prolonged for many months by this operation and the avoirdupois of the patient increased. These cases were alive and doing well respectively six and four months after the operation. As to the ultimate results he could gain no information.

Dr. Ransohoff then presented the specimen with the communicating orifice between the stomach and intestine. At the *post-mortem*, some milk which had been administered in minute quantity to the patient after the operation was recognized in the intestine.

So far as the speaker knew, this was the seventh gastro-enterostomy that had been performed. The operators were Wölffler, Billroth, Lücke, Lauenstein, Rydygier, Courvoisier, and himself. Of these cases, two temporarily recovered (Wölffler and Lücke).

Wölffler performed the first operation in September, 1881, and it is, therefore, entirely too early to predict its future history. When it is remembered that cases of malignant, and even of non-malignant, stricture of the œsophagus succumb to starvation, nothing more plausible than this operation can be imagined. It side-tracks an unimportant part of the alimentary canal and allows the digestive processes to be conducted in an almost natural manner. It in so far is infinitely preferable to establishing an intestinal fistula through which the patient is to be fed. In non-malignant pyloric strictures, the speaker believed that gastro-enterostomy would, in the course of time, supplant excision of the pylorus.

Concerning this operation for malignant disease, he could only express his admiration for the bold attempts made to prolong life in otherwise hopeless cases. He had not seen any recent statistics relative to the subject, but believed that one hundred cases could be collected, not one of which, so far as he knew, had permanently recovered. The reason for this uniform mortality lies in the prolonged waiting for positive objective symptoms to develop. When these are unmistakable, the disease has usually progressed so far that a radical removal of the tumor must be despaired of, or adhesions to the neighboring organs render the operation utterly impracticable. If, in the case presented by him, an operation had been made three or four months sooner, the small size of the neoplasm, and its absolute freedom from adhesions, would have permitted easily excision of the pylorus, and some slight hope for permanent recovery might have been warranted.

DR. S. NICKLES remarked that he thought it was about time to take the subject under discussion out of the hands of the surgeons, for all the patients died. He called attention to a method of diagnosis of cancer of the stomach proposed by Dr. R. von den Velden in 1879. In numerous cases of dilatation of the stomach, von den Velden had washed out the stomach, and had carefully determined the chemical reactions of its secretions. In eight cases of gastric cancer he constantly found the contents of the stomach destitute of free hydrochloric acid. The like defect was found also in typhoid fever, and temporarily in some cases of dilatation not due to cancer. He supposed that his observation might be of great service in the differential diagnosis between pyloric stenosis from cancer and that from other pathylogical conditions. If free hydrochloric acid is found in the stomach contents, cancer may be excluded and a favorable prognosis may be made, but should the acid be absent, the diagnosis will remain doubtful until the stomach had been washed out for eight or ten days, when, if the acid should be found, its previous absence might be attributed either to the presence of a concomitant catarrh or to a febrile process, but should the acid remain absent, the presence of

cancer would be exceedingly probable, at least the prognosis would be unfavorable.

Rosenbach states that he found free hydrochloric acid absent in two cases of atonic dyspepsia, in which no accumulation of mucus in the stomach had taken place, and also in one case of digestive disorder produced by severe anæmia. Edinger had reported cases of amyloid degeneration of the gastric mucous membrane in which he could not detect free hydrochloric acid.

The statement that cancer may result from chronic gastric catarrh, led the speaker to reflect upon the treatment of cancer of the stomach by condurango, as proposed a number of years ago. He thought it probable that the favorable results that were said to have been obtained from that remedy, were in reality due to its beneficial action in some forms of gastric catarrh, in which it had been found to relieve pain, arrest vomiting, and restore the appetite.

As regards the diagnosis, the speaker was of the opinion that if a patient have paroxysmal pain referable to the stomach, if he vomit frequently some hours after eating, if he is emaciated and weak, and especially if a tumor can be felt, cancer may be suspected. But sometimes when all these symptoms are present, cancer does not exist, and, on the other hand, when several of them are absent, cancer is found *post-mortem*. Some cases run to their termination without vomiting, some without marked pain, and some present no tumor. Leube last year reported a case (*Deutsche Archiv für klinische Medicin*, Bd. 33, p. 3) which well illustrates the difficulties not infrequently encountered in the diagnosis. The patient for years was occasionally affected with heartburn, weight in the epigastrium, nausea, and vomiting. These symptoms gradually recurred more frequently and continued longer. Coagulated blood was several times found in the vomit. There was fulness of the epigastrium, and pain over a circumscribed part of the stomach. The patient was much emaciated. A tumor, hard, nodulated, painful on pressure, and as large as a plum, was found to the right of the umbilicus, and the stomach extended three or four fingers' breadth below the umbilicus. The washings of the stomach *always contained an abundance of free hydrochloric acid.* It was determined to excise the tumor, and the patient left the hospital to arrange his affairs. After five days he returned to submit to the proposed operation. All the symptoms remained as formerly, but the tumor was no longer to be felt, even when the patient was under the influence of chloroform. The operation, of course, was not made. Improvement followed a carefully regulated diet, and frequent washings of the stomach. The dilatation of the stomach was still present after the lapse of a year and a half, but a tumor could not be detected again. Leube says that in five other cases he had detected tumors having all the characters of gastric cancer in emaciated patients, which disappeared during treatment.

If it were true that cancer can originate from gastric catarrh, then it ought occur even more frequently than it is supposed to, for there is scarcely an individual, the speaker thought, who has not at some time in his life a more or less persistent gastric catarrh.

Reverting to the statement in regard to the absence of hydrochloric acid from the gastric juice, the speaker thought that, if true, we may in the future be able to recognize these cases earlier and turn them over to the surgeon in time for some good to be done by operative means. Being asked how he accounted for the statement recently made, that the amount of urea found in the urine in cases of cancer is greatly reduced, he said that he thought it due simply to the fact that these patients are able to digest but a small amount of food, and hence a smaller quantity of urea is formed.

NEW YORK STATE MEDICAL ASSOCIATION.

First Annual Meeting, held at the Murray Hill Hotel, New York, November 18, 19, and 20, 1884.

(Specially reported for THE MEDICAL NEWS.)

TUESDAY, NOVEMBER 18TH—FIRST DAY.

MORNING SESSION.

THE PRESIDENT, HENRY D. DIDAMA, M.D., of Syracuse, called the Association to order, and DR. J. W. S. GOULEY, Chairman of the Committee of Arrangements, made an

ADDRESS OF WELCOME,

and gave a brief analysis of the programme of the proceedings. Over fifty papers had been received, of which 16 were directed to medical, 16 to surgical, 9 to obstetrical and gynecological topics, and the remainder to subjects in various other departments. He trusted that by another year every county would be represented by one or more papers, and that the scientific work of the Association would be divided among five sections.

DR. DIDAMA then delivered the

PRESIDENT'S ADDRESS.

In the world of medicine, a happy medium between desire for novelty and conservatism, was desirable for true progress. Having referred to the modern investigation of microörganisms as the cause of disease, which he likened to the gold and petroleum fevers in the commercial world, he proceeded to speak of the subject of therapeutics. "The real physician," he quoted, "is the one who cures," and he then paraphrased the familiar text from St. Paul, as follows: "Now abideth there three, diagnosis, pathology, and therapeutics; but the greatest of these is therapeutics." This was the one thing needful. In the examination of candidates for the degree of M.D., this, he thought, should be the cardinal point. It was important that the great essentials of the science of art and medicine should not be considered secondary to the matters of general scientific knowledge and literary culture. A State board of examiners might perhaps determine the minimum knowledge requisite; but if the mint and anise and cumin were taken into account, to the neglect of the weightier matters of the law, a wrong would be inflicted on the physician and a fraud would be perpetrated on the public. While many of the facts in regard to the action of certain well-known drugs, and the efficiency of certain therapeutic measures, which he enumerated, are well established, our views are liable to be constantly modified by the effect of new discoveries, and the profession stands ready to give a hearty welcome to every new remedy or measure that has the endorsement of good authority. We are hampered by no dogma, and our

platform is broad enough for all who desire the advancement of truth.

In regard to the subject of medical education, he said that it was the fashion to condemn in unmeasured terms the course of study pursued in the colleges; but indiscriminate condemnation, he thought, was unjust and likely to overreach itself. The medical schools in this country had certainly produced many physicians and surgeons of the greatest distinction, and their clinical advantages were often unsurpassed. If too easy entrance and graduation were met with in these institutions, was it not because the profession had not really demanded greater proficiency? The earnest and devoted teachers in them, he believed, are willing and eager to advance the standard to the highest point at which they would be supported by their brethren. That excellent results had been attained under the present system could not be denied; but with a higher standard of medical education they would have been still more admirable. Having stated that the superiority of the graded system was not universally acknowledged, and that many prejudiced persons still preferred the old chaotic state, Dr. Didama proceeded to contrast the effect upon the student of the lecture courses as usually given in our colleges, and of a properly graded course of three years of medical study, with the numerous examinations incidental thereto; that the latter was the natural system of medical education was no longer a dream, but an established fact. By means of this, broad foundations were laid upon which it was easy to erect the complete superstructure; while under the old *régime* all was confusion and uncertainty. Having thanked the Fellows for the honor they had done him in making him their first president, Dr. Didama congratulated the Association on the auspicious circumstances under which it was now starting out.

The President then announced the following

COMMITTEE ON SCIENTIFIC CONTRIBUTIONS:

Drs. E. S. F. Arnold, of New York; O. S. Clark, of Cayuga; Wm. Gillis, of Franklin; G. W. Avery, of Chenango; and J. C. Hannon, of Rensselaer County.

THE ANNUAL REPORT OF THE COUNCIL

was presented by the Secretary. At an adjourned meeting of the Council held the preceding evening, November 17th, the number of Fellows of the Association had been increased from 168 to 368. Of the 168 original Fellows 9 had died, among the latter being Drs. John [illegible]ams and Allen S. Church, of New York. As an amendment to the Constitution, it was proposed that seven members of the Council, instead of ten, as at present, should constitute a quorum.

DELEGATES FROM OTHER STATE SOCIETIES

were then announced, and invited by the Chair to seats in the Association. Dr. Earle, of St. John, New Brunswick, was also introduced.

TREASURER'S REPORT.

The Treasurer, Dr. John H. Hinton, reported that he had received, since February 6th, the sum of $1460 for initiation fees, $126 for annual dues, and $100 as a contribution from Dr. Didama, making a total of $1686. The disbursements had amounted to $1003.49, leaving a balance of $682.51.

REPORT OF THE COMMITTEE ON THE ORGANIZATION OF DISTRICT ASSOCIATIONS.

DR. GOULEY, Chairman of the above special committee, reported that the committee recommended the formation of five district organizations, according to geographical situation, with objects the same as the parent association; that the first should be called the First, or Northern District Association, the second, the Second, or Eastern, the third, the Third, or Central, the fourth, the Fourth, or Western, the fifth, the Fifth, or Southern District Association; that each district association should have its own executive committee and officers, that the executive committee should manage its affairs, that the vice-presidents of the parent association should be the presidents respectively of the district association to which they geographically belonged, that these presidents should report the scientific proceedings of their associations, with a list of papers presented to the parent association, and that the district associations should hold one stated meeting annually, and as many special meetings as were deemed advisable. In recommending the adoption of this plan of organization, Dr. Gouley said that in many of the counties it had always been impossible to get up society meetings of any interest on account of the small attendance, but with the medical men of twelve, thirteen, or fourteen counties thus gathered together, the interest would be greatly enhanced. If concerted action was taken in regard to this matter, the profession would undoubtedly be greatly benefited scientifically and socially, and the hands of the parent association would be greatly strengthened. After considerable discussion of the relations of such district associations to existing county societies, the plan of organization recommended by the Committee was unanimously adopted.

DR. E. M. MOORE, of Rochester, then delivered

THE ADDRESS IN SURGERY.

He took for his subject, *Transfusion of Blood*, in regard to which, he said, there was still much to be learned, since no one method had proved superior to all others, or had inspired the implicit confidence which it was desirable should be attained. He gave a historical *résumé* of the subject, and then stated that in the early stages of the procedure there had been dangers which could now be avoided. The chief of these were, ingress of air into the veins, and a change in the constitution of the blood for coagulation. The reason that the blood was so apt to coagulate was on account of the comparatively long time which was occupied in the transfusion; and this, he thought, ought to be avoided by continuing the operation only for a certain specified and definite time. In an apparatus which he had devised, and which he now exhibited, this could be accomplished very satisfactorily. The canula was provided with a rounded stilette, on which coagula could not readily form, and with an arrangement by which the flow of blood through it could be instantaneously checked. It was fitted into the lower extremity of an elongated rubber sac, which, he thought, was preferable to a syringe, from the fact that the packing of such an instrument always had to be lubricated in order to render it tight, and impurities are thus liable to be introduced. The blood of the donor was to be taken, as

a rule, from the cephalic vein, which was to be carefully exposed and raised so as to secure a copious stream of blood when the incision was made into it. The stream was allowed to flow into a funnel resting on the tip of the sac, and the time of the operation was accurately watched by an assistant, who announced the end of each ten seconds. After about two ounces of blood had been received into the sac, the upper part of the latter was rolled up so as to make a certain amount of pressure. Dr. Moore thought more than two ounces of blood should never be injected, on account of the time which it took to inject more, as it was all important that the transfusion should take place during the period of the vitality of the blood. Even less than this was often sufficient; but when a larger quantity seemed to be required, the operation was to be repeated after a greater or less interval. He preferred blood in its natural condition to defibrinated blood, or to any of the saline preparations which had been suggested as a substitute for blood. In conclusion, Dr. Moore referred to a number of conditions in which transfusion seemed to be applicable, and also related some cases in which it had proved of service in his own experience.

DR. TOWNSEND, of Genesee County, who had seen in consultation one of the cases referred to by Dr. Moore, confirmed his report of the beneficial effects of the measure.

ADDRESS BY THE PRESIDENT OF THE NEW YORK COUNTY MEDICAL ASSOCIATION.

DR. WM. DETMOLD, President of the New York County Association, was introduced, and made a few remarks. The better part of the profession in New York City, he said, were deeply grieved when the State Medical Society was the means of having the great Empire State refused representation in the American Medical Association, and, therefore, the idea was conceived by them of reclaiming the profession here by the formation of a County Association which was unalterably pledged to support the National Code of Ethics. By this means the hydra of nihilism in the medical profession was held under control. He felt a pardonable pride in having been chosen to be the first President of so noble a body, and the work that had already been accomplished by it seemed to him worthy of the highest commendation. Since its first scientific meeting, held on the 11th of January last, when Prof. Austin Flint read a paper on "The Pathological and Practical Relations of the Bacillus Tuberculosis," a series of most valuable papers had been presented, which had elicited lively discussions, and a number of rare pathological specimens had been exhibited and commented upon.

A recess of ten minutes was then taken, during which the various

DISTRICT ASSOCIATIONS ORGANIZED

in accordance with the plan proposed by the Committee, of which Dr. Gouley was Chairman, and when the session was resumed the Secretary announced the following reports from them:

First District: Dr. John P. Gray, of Utica, Chairman, date and place of first stated meeting, second Tuesday in July, at Utica.

Second District: Dr. Wm. H. Robb, of Montgomery Co., Chairman, fourth Tuesday in June, at Saratoga.

Third District: Dr. H. D. Didama, of Syracuse, Chairman, second Tuesday in June, at Syracuse.

Fourth District: Dr. B. L. Hovey, of Monroe Co., Chairman, second Tuesday in May, at Rochester.

Fifth District: Dr. N. C. Husted, of Westchester Co., Chairman, third Monday in September, at Brooklyn.

AFTERNOON SESSION.

DR. J. C. HUTCHISON, of Brooklyn. read a paper on

TRANSFUSION.

While transfusion had been known for more than five hundred years, and many lives had undoubtedly been saved by it, it had to be admitted, he said, that the operation had failed to accomplish all that had been expected of it, and that at the present day it was not so frequently resorted to as formerly. If the apparatus required could be simplified, the dangers of the procedure diminished, and a better fluid found, it would undoubtedly come more into vogue, and, with a view to aid in securing this result, he had devised an apparatus, which he now proceeded to explain. It consisted, first, of a graduated glass cylinder, holding twelve ounces, and terminating below in a metallic cap. In this, which was perforated, a female screw was fitted, while the opening at the top was filled with rubber cork (to prevent loss of heat as far as possible), which was traversed by a thermometer. When the apparatus was to be used, the cylinder was placed inside a double rubber jacket, in the joint of which there was a slit, through which the graduated scale on the cylinder could be observed. The object of the rubber jacket was to preserve heat, and it was filled with hot water by means of a rubber tube, at one end of which was a male screw, which was first to be attached to a nipple-shaped stopcock at the top of the jacket. The free extremity of the tube was placed in a vessel of hot water held at a sufficient elevation to allow the water to flow down and fill the jacket. When this was filled, the other end of the tube was screwed into the female screw at the bottom of the glass cylinder, and to the extremity of the tube which had been in the hot-water vessel was attached a canula provided with a stopcock, which was to be inserted into the vein of the patient (preferably the median basilic). The canula which Dr. Moore had exhibited in the morning was, he thought, the best that he had ever seen, and in the future he would be glad to make use of it.

Having mentioned the dangers and objections which had been urged against the use of blood, whether defibrinated or not, and having spoken of the use of milk in unfavorable cases, he referred to the history of the employment of saline solutions, to which he gave the preference over any other fluid. Its action, he thought, to be dynamic rather than nutritive. In injecting a saline fluid into the veins the quantity used should not exceed one ounce per minute, and the flow was to be maintained until from twelve to twenty ounces had been employed. Having spoken of the use of saline injections in cholera, and made a comparison between arterial and venous injections, Dr. Hutchison announced the following conclusions:

1. It had been proved by clinical experience, and experiments on animals that the red corpuscles of blood

were short-lived and rapidly underwent disintegration; so that the utility of transfused blood could not reside in the corpuscles.

2. An important element in the benefit derived from transfusion was the restoration of vital fluid to the vascular system, and the strengthening of the action of the heart.

3. Saline solutions were simpler and more efficacious than blood.

4. If the recent claims made for intravenous injections in the treatment of cholera, and other grave conditions, were confirmed, the operation of transfusion was one of great importance.

DR. ROCHESTER, of Buffalo, believed that to quality rather than to quantity was due the benefit received from transfusion, and he related a case to show the remarkably good effect produced by the injection of less than two ounces of blood—probably not more than an ounce and a half. In such a small quantity of blood, therefore, he thought there must be something more than merely a dynamic effect. In the cholera epidemic of 1849–50, in New York, transfusion was practised somewhat after the manner described by Dr. Hutchison, but while temporary benefit was caused by it, all the patients died.

DR. ALFRED L. CARROLL, of Richmond County, Secretary of the State Board of Health, read a paper on

THE DURATION OF CONTAGIOUSNESS AFTER ACUTE INFECTIOUS DISEASES.

In order to obtain some light on this subject, which was one of great practical importance, several months ago he had addressed a circular of inquiry to a number of the most eminent teachers throughout the State to find out their views in regard to the period of contagiousness in smallpox, scarlatina, measles, diphtheria, typhus fever, typhoid fever, and pertussis. With the exception of smallpox, with regard to which there was a pretty general unanimity, there was a great variety of opinion in regard to the various zymotic diseases. Much observation was still needed to arrive at any definite conclusion. Here was an excellent field for collective investigation, and he trusted that the Fellows of the Association would be willing to assist in this work.

Papers on *The Therapeutics of Diphtheria*, by Dr. J. W. Moore, of Albany County; and on *Notes on Dislocations of the Hip Based upon 238 Cases Occurring in the State of New York*, by Dr. Frederick Hyde, of Cortland County, were read by title.

DR. JOHN S. JAMISON, of Steuben County, read a paper on

CHRONIC INTESTINAL CATARRH,

in which he gave a detailed description of the affection, and related his experience with eighty-one cases in soldiers which were contracted during the late war.

DR. EDWARD R. SQUIBB, of Brooklyn, read a paper on

THE MODERN PROGRESS OF MATERIA MEDICA.

Among the points touched upon in the paper were the following: The thoughtful physician seemed to realize more and more that his success as a practitioner depended on his utility to the public; the value of the word "cure" was better understood and specifics less looked for; the doses of medicines are regulated not by the books, but by their pathological and therapeutic effects; the quality of drugs was more closely scrutinized, fewer and more active agents were used, and were employed more simply; medicines were used in more concentrated forms, precision in weights and measures was much more common. It was getting to be understood that the so-called active principles of drugs did not represent their qualities, and the power and definite action of remedies were better known. It was not to inferred, however, that all the changes of the last twenty-five years were improvements.

A paper on *Intestinal Obstruction*, by Dr. Avery Segur, of Kings County, was read by title.

DR. W. H. ROBB, of Montgomery County, read a paper on

THE MANAGEMENT OF CRIMINAL ABORTION.

The cases to which he wished to direct attention were those occurring before the fifth month of utero-gestation, and in the paper he discussed the best methods (1) to control hemorrhage; (2) to remove the entire ovum; (3) to avoid septicæmia; and (4) to restore the woman to health.

DR. VAN DE WARKER, of Syracuse, said that at or before the third month he had never seen any good effects from the use of ergot, whether administered hypodermically, as recommended by Dr. Robb in urgent cases of hemorrhage, or by the mouth. The reason why ergot was not of service, he believed, was because the uterus had not its machinery for contraction in working order at this time, as at a later period. Furthermore, he thought that erratic and irregular contractions were often excited by it; and hence he considered that it was a waste of time to give ergot.

The tampon, except as a temporary expedient when the physician was suddenly summoned at night, was never to be resorted to, and sponge-tents, in his opinion, were not required to dilate the cervix uteri. If chloroform were used in sufficient quantity to produce partial anæsthesia, there would be no difficulty in dilating with such an instrument as Ellinger's, and then introducing the finger. The blunt curette was of service in dislodging the remains of the ovum, and after this had been done it was often advisable to swab out the cavity of the uterus with tincture of chloride of iron.

DR. R. H. SABIN, of Albany County, said he believed that the use of the tampon was attended with great danger, and related a case in which rupture of the uterus was produced by it.

DR. CHARLES BUCKLEY, of Monroe County, read a paper on

CHRONIC MERCURIAL POISONING.

He had treated an obscure case with bloating and marked gastro-intestinal and nervous disturbances, the symptoms of which suggested arsenical poisoning; but which afterwards proved to be due to mercurial poisoning. The cause of the trouble was a red, hard, rubber plate for false teeth, in the coloring of which mercury was employed. Since then Dr. Buckley had seen several other similar cases due to the same cause, although none of them was of equal severity with the first.

DR. SABIN, of Albany County, read a paper on

A CASE OF ACUTE LEAD POISONING RESULTING FATALLY.

The patient was a young man who died thirty-two

hours after the first attack. He fell down suddenly at a ball and never regained consciousness. There was probably effusion on the brain, but no autopsy was allowed.

EVENING SESSION.

A paper on *Pyæmia and Death after the Operation for Convergent Squint*, by Dr. J. J. A. Burke, of Monroe County, was read by title.

DR. H. E. MITCHELL, of Rensselaer County, read a paper on

ERRORS OF REFRACTION; THE IMPORTANCE OF THEIR RECOGNITION AND CORRECTION IN EARLY LIFE.

In order to be able to determine whether it was advisable for a patient to consult an oculist or not, and to diminish the rapidly increasing number of defective eyes among children, he thought it would be well if general practitioners would provide themselves with a set of the ordinary test-types, and also with the optometre, an instrument which was but little known, but which might prove of great service. He then exhibited the best form of the instrument.

DR. AUSTIN FLINT, SR., of New York, read a paper on

THE DIETETIC TREATMENT OF DYSPEPSIA.

The first point which he wished to make was, he said, that dyspepsia denoted an affection distinct from indigestion. Having described certain of the symptoms of dyspepsia, he remarked that it was, in many cases, referable to the mind, a fact which he believed he had been the first to call attention to, in a paper published in the *American Journal of the Medical Sciences* in 1842. He then spoke of the fallacies which had formerly been entertained, more particularly in New England, in regard to the advantages of a severe regimen and restricted diet. At the present day, dyspepsia was much less frequent than in past years, and those who did suffer from it were mostly those who endeavored to regulate their diet and habits in accordance with the notions that formerly prevailed. One very prolific source of trouble was the practice of introspection thus engendered.

In the treatment of dyspepsia the patient was to be encouraged to forget his strict habits of eating. No rigid system was to be observed, and food in sufficient quantity and variety was essential. The guides for eating should be the appetite, the palate, and common sense. The cravings of nature were not to be disregarded. The patient's experience with certain articles of food was apt to be extremely fallacious, and he should not be guided by this, for what at one time might disagree with him at another might give rise to no trouble whatever. Dietetic idiosyncrasies were vastly less numerous than was generally supposed to be the case. The instructions to such a patient, therefore, should be something like the following: Do not adopt the rule of eating only at stated intervals, but eat whenever you desire food. Be doubtful of your past experience, and eat whatever is most acceptable to your palate. Try to have good cooking, and never leave the table until your hunger is perfectly satisfied. Eat animal as well as vegetable food, and take as much fluid as thirst dictates. In general, the diet which was beneficial to the healthy individual was beneficial to the dyspeptic. It was a fallacy to suppose that the organs of digestion required periods of prolonged rest. If allowed to rest, their functions would become perverted. It was of great importance that the dyspeptic should occupy his mind with other classes of objects than his food. Practical lessons on this subject might be learned from the gourmand, who, whatever else he might suffer from, seldom had dyspepsia; and the same was true, on the other hand, of the hard-working mechanic, who, instead of living to eat, eats to live.

(To be concluded.)

OBSTETRICAL SOCIETY OF PHILADELPHIA.

Stated Meeting, November 6, 1884.

THE PRESIDENT, R. A. CLEEMANN, M.D., IN THE CHAIR.

REMOVAL OF UTERINE APPENDAGES FOR MENSTRUAL EPILEPSY; RECOVERY.

DR. E. E. MONTGOMERY reported the case of Sarah H., æt. 17, admitted to Philadelphia Hospital, April 1, 1884. She suffered from an attack of inflammatory rheumatism in childhood, and began to have epileptic seizures in her thirteenth year; these were slight at first, but have recurred every month, increasing in number and violence, so that at present she is unconscious from ten days to two weeks out of each month. There has only once been a trace of menstrual discharge, and that for a single day only. There is no history of any chronic disease in the family; brothers and sisters are healthy. The patient was pale, flabby, anemic, poorly developed, and extremely nervous. The external genitals were but slightly developed, the uterus small, and no special tenderness over the pelvis. Iron, tonics, and a generous diet were given; the bromides were not well borne. Owing to her youth, and the fact that she had not yet menstruated, it was deemed best to undertake to establish the menstrual function, and exhaust the antispasmodics before resorting to operative interference. The failure of all remedial measures was complete, and on September 13th the operation was performed; both ovaries and tubes were removed. No antiseptic was used about the wound. All the water used had been well boiled. Absorbent cotton was placed over the wound, which had been closed with silk sutures. The operation occupied thirty-five minutes. The recovery was uninterrupted until the night of the 26th of September, when she had four epileptic seizures. There were recurrences of slighter attacks during the next three nights, but they were shorter, and during the intervals she was perfectly conscious. During the first four days of October, spells of staring, with momentary unconsciousness, occurred, becoming less frequent and lighter. A well-marked convulsion on the night of October 14th was followed by from one to four convulsions daily until the 29th. But they have not been so severe as before the operation.

REMOVAL OF PAROVARIAN CYST; RECOVERY.

DR. E. E. MONTGOMERY presented the specimens, and related the history as follows: Mrs. A., æt. 30 years, native of England, married, never pregnant, has suffered from an enlargement of the abdomen for seven

years. As it was first noticed a few months after her marriage, she supposed herself pregnant. Her menses have never been interrupted, now occur every three weeks, are very slight, and have never been excessive. She suffers from severe pain the week before menstruation over the lower portion of the abdomen and through the hips. She suffers at other times from pain in the feet and legs, and from a sensation of weight. The tumor has been tapped some six times. The fluid was always of a pale straw color. The largest quantity removed at any one time was forty pounds. Previous to its removal, her weight was one hundred and two pounds. The last tapping was on June 27, 1884. She has had four attacks of peritonitis.

When first seen last July, two weeks after the last tapping, the abdomen was swollen, and tender to pressure; fluctuation was distinct. Since that time the abdomen has increased considerably in size, presenting a prominent tumor distending the whole abdomen, nearly symmetrical, but projecting slightly to the right side; circumference at umbilicus 32 inches, distance from symphysis to umbilicus 7 inches, to ensiform 13 inches; fluctuation distinct over the whole tumor, coughing projects the whole mass forwards and downwards. Her general condition is good. She is quite active. *Diagnosis*, a parovarian cyst. *Plan of operation*, exploratory incision, remove the tumor if possible, but if the adhesions were too great to permit that, then to open the sac, stitch it to the integument, and introduce a drainage-tube and thus secure obliteration of the sac.

Operation, October 9th, abdominal wound 4 inches, adhesions universal, but generally broken up without difficulty, no ligatures were needed. The intestines were not seen, being concealed by old inflammatory deposits. The right ovary was enlarged, and was also removed. The wound was closed with seven sutures, and a glass drainage-tube introduced. Salicylated cotton in a thick layer was placed over the wound. Suppositories of morphia were used to control pain, which continued to a greater or less extent for two weeks, arising partly from inflammatory conditions and partly from collections of gas in the intestines. The abdominal wound discharged freely—three ounces the first day. The drainage-tube was removed on the 13th, four days after the operation, but the discharge of bloody serum, pus, and flaky lymph continued for full two weeks later, when the wound closed entirely, and the patient was discharged.

CORRESPONDENCE.

HYDROCHLORATE OF COCAINE IN MINOR SURGERY.

To the Editor of THE MEDICAL NEWS.

SIR: Contributions as to the use of the hydrochlorate of cocaine as a local anæsthetic are now of value in as much detail as practicable. I therefore beg leave to state that, assisted by Dr. T. Mitchell Prudden, Director of the Pathological Laboratory of the College of Physicians and Surgeons in New York, and Lecturer on Histology in this College, I to-day removed a small tumor about the size of a marrowfat pea (suspected epithelioma) from the cheek of an elderly lady, without causing her any appreciable pain during the operation, by the use of this drug. I first injected subcutaneously five minims of a four per cent. solution of the drug, obtained from Dr. E. R. Squibb, of Brooklyn, and after waiting ten minutes, as she said she still felt the point of the hypodermic needle perceptibly, I repeated the dose. At the end of ten minutes more, as she said she still felt the needle, I injected five minims more *into* the skin. It required some force to the piston of the syringe to inject this into the firmer tissue. At the end of five minutes more I began the cutting; the patient said she "felt it, but it didn't hurt—it felt like scraping." The piece removed was about three-quarters by half an inch. There was quite a free hemorrhage from the little wound and I waited fully five, perhaps eight minutes for that to subside, when the sutures were introduced. She then exclaimed, "There! that hurts! that is worse than anything I have felt yet!" After dressing the wound, the time from the first injection was thirty-seven minutes. As she left the office she expressed herself as experiencing a sense of exhilaration; and "felt much better than when I came in."

It is unnecessary to enlarge upon the prospect thus opened to us certainly in the field of minor surgery, aside from its uses in ophthalmic practice, if the reports so far given of the effects of this new anæsthetic should be confirmed by further experimentation. I desire to record my experience of its action as applied to the external skin, and to point out that (I think) I found a better effect by injecting the solution *into* the skin rather than under it.

Yours, etc.,

W. H. CARMALT, M.D.,
Professor of Surgery in the Medical Department of Yale College.

NEW HAVEN, CONN., Nov. 15, 1884.

NEW INVENTIONS.

A NEW CERVICAL NEEDLE.

BY CHARLES MEIGS WILSON, M.D.,
OF PHILADELPHIA.

THE needle represented in the accompanying cut was specially designed to overcome the difficulty in approximating the denuded surfaces in Emmet's operation for restoring a lacerated cervix. The penetrating arm is placed at a right angle to the shank or handle—giving the instrument great leverage, and consequently penetrating power, and great freedom of motion. The eyelet is placed just behind the lance-shaped point; the needle is intended to be threaded after it has pierced the tissues.

The arc of curvature in the penetrating portion of the needle is small. The needles are made both right- and left-handed to suit the convenience of the operator and the exigencies of the case. In suturing a freshened cervix, it is best to commence with the right-hand needle, passing it from above downwards, the operator commencing on his right-hand side—the patient's left. He may continue in this manner until the whole wound is closed, or use the left-hand needle for that portion of the wound to the right-hand of the median line of the

cervix. The needle has also been advantageously used in closing both recto-vaginal and vesico-vaginal fistulæ. Recently, at the Pennsylvania Hospital, Dr. Levis used it in the latter operation to close the wound after other means had failed. It is especially serviceable when the fistula is high up. It has also been successfully employed in catching up the peritoneum in closing abdominal wounds.

The advantages claimed for it are the great purchase it gives the operator in piercing dense, hard tissue, and its power of penetration. Every one, in operations about the cervix and upper portions of the vagina, must have experienced difficulty in manipulating the ordinary straight or curved needle managed by the needle-holder, felt the want of play or freedom of motion, and sometimes been in doubt as to where the needle was really going. Again, the pressure exerted upon the needle by the needle-holder often causes it to break, and the ordinary needles have the eye at the end engaged by the needle-holder, and in removing the needle-holder the suture is often inadvertently withdrawn. These difficulties have been overcome in the hands of the author. Dr. E. Wilson has used these needles in a series of hystero-trachelorrhaphies now numbering one hundred and twenty; Dr. Thomas Morton in a large number of cases, and many other gentlemen engaged in the practice of gynecic surgery. Correct patterns of the needles can be obtained from the well-known surgical cutler, Mr. Snowden.

NEWS ITEMS.

NEW YORK.

(From our Special Correspondent.)

SUCCESSFUL LAPAROTOMY FOR GUNSHOT WOUND OF INTESTINE.—DR. W. T. BULL recently performed a most remarkable and successful operation of laparotomy, extracting a conical ball of forty-four calibre from the intestines of a would-be suicide.

THE INVASION OF CHOLERA.—Grave fears are entertained of the invasion of Asiatic cholera. Dr. F. H. Hamilton recently read a paper calling attention to the introduction of the disease into this State by way of the suspension bridge many years ago. Dr. J. C. Peters, who has given special attention to the study of the disease, expressed his fear of its approach, and the Secretary of the Treasury has been appealed to by a number of medical men who besought him to take active measures for prevention.

THE CHARITY HOSPITAL TRAINING SCHOOL graduated eighteen nurses last week, all of whom will doubtless find immediate employment. Despite the large number of trained nurses, it is very difficult at times to find one disengaged. Many of these young women soon tire of their calling, and either take up new kinds of occupation or enter into partnerships which lead eventually to other forms of nursing.

CHICAGO.

(From our Special Correspondent.)

THE CHICAGO MEDICAL COLLEGE opened on September 23. Several changes have been made in the faculty. The chair of physiology, left vacant by the resignation of Dr. Henry Gradle, has been filled by the appointment of Dr. R. W. Bishop (Friedrich Wilhelm University, Berlin). Dr. I. U. Danforth has assumed the duty of teaching the pathology of renal diseases. Dr. W. E. Casselberry (University of Pennsylvania) has been elected Professor of Materia Medica and Therapeutics. Dr. W. W. Jaggard (University of Pennsylvania) has been elected Adjunct Professor of Obstetrics. To Dr. Frank Billing's duties as Demonstrator of Anatomy, the faculty has added those of Lecturer on Physical Diagnosis. Dr. J. S. Marshall has been elected lecturer on Oral and Dental Diseases. Dr. N. S. Davis, Jr., has been appointed Lecturer on General Pathology and Pathological Anatomy, working under the direction of Prof. Christian Fenger, M.D., who has full charge of this department. Dr. Frank S. Johnson has been appointed Lecturer on Histology, acting under the direction of Prof. Lester Curtis, M.D. The system of instruction at Chicago Medical College comprises three consecutive annual courses of lectures. Chicago Medical College was *the first* institution in the United States to make this radical change in medical education. The duration of the winter session is six months. The members of the first year class number 48; second year class, 31; third year class, 42. The clinical facilities of the institution are afforded by Mercy Hospital, St. Luke's Hospital (recently enlarged), Michael Reese Hospital, and the South Side Dispensary.

RUSH MEDICAL COLLEGE opened also its doors on September 23, with a graduating class numbering 140 men, and a new class of 260 members. The duration of the winter term is twenty-one weeks. The Cook County Hospital, the Presbyterian Hospital, and the Central Free Dispensary furnish abundant material for clinical instruction. The Presbyterian Hospital has been recently constructed, at a cost of $50,000, and placed under the guardianship of the faculty of Rush Medical College. Thirty beds are now occupied by patients. The attendance at the Central Free Dispensary during the past year has been exceptionally large. Twenty-seven thousand cases have been treated during this period in the various departments.

THE COLLEGE OF PHYSICIANS AND SURGEONS opens its annual session with a graduating class of 60 men, and 105 undergraduates. Recent changes in the faculty have been made. Dr. S. K. Crawford, of Monmouth, Ill., has been elected Professor of Surgical Anatomy; Dr. H. D. Valin has been appointed Assistant to the chair of Physiology; Dr. A. J. Sauniere, of Liberty, Ill., has been chosen as Lecturer on Histology. Material for clinical instruction is derived from the Cook County Hospital and the West Side Dispensary. The length of the winter session is twenty-one weeks.

THE WOMAN'S MEDICAL COLLEGE has a term embracing fully seven months of consecutive instruction by the regular faculty. The graduating class numbers 30, while the first year class has 41 members.

A CONTINUOUS, TEPID-WATER BATH on the place, suggested by the elder Hebra, is in course of construction in the Michael Reese Hospital. This hospital has a maximum capacity of ninety beds, with surgical instruments, electrical apparatus, etc., valued at $10,000.

DIPHTHERIA.—Epidemic diphtheria on the west side of Chicago, and in various parts of the State, of a peculiarly malignant type, has been reported by Health Commissioner De Wolfe. Dr. De Wolfe, at the time of writing, is engaged in the investigation of the alleged epidemic.

CINCINNATI.

(From our Special Correspondent.)

THE HEALTH OF CINCINNATI.—The long-continued healthful condition of our city appears to be about at an end. The rate of mortality, for several months exceptionally low, was last week 22.91 per thousand per annum, as announced in the weekly report of the health office. There were in all 123 deaths during the week. More of these were due to consumption than to any other disease. In three wards of the city measles is almost epidemic, and of a rather severe type; other parts of the city are free from the disease. Diphtheria, scarlatina, and typhoid fever are also present in the city.

THE COLLEGES.—The attendance at our colleges this winter is unusually small. The Medical College of Ohio still takes the lead with a few more than two hundred students, while the Miami has about one hundred, and the Cincinnati forty.

COCAINE.—Prof. W. W. Seely, in his dispensary in the Medical College of Ohio building, the largest dispensary in the city, has used this new remedy. Of course, with a limited amount of the drug, no absolutely convincing conclusions could be arrived at. That it reduces the conjunctival and corneal sensibility, there can be no question. Where the corneal and conjunctival sensibility is increased by disease, the results are less striking. For all superficial operations, such as removing foreign bodies from the cornea, inserting the speculum, fixing the eye with the forceps, etc., it certainly has a wonderful effect. One patient upon whom tenotomy of the external rectus had previously been performed, said that all the ordinary steps, such as the presence of the speculum, fixing the eye, etc., were freed from pain, while the hooking up of the tendon was attended with about the same amount of pain as he had formerly experienced. The most striking cases Prof. Seely has had were two of corneal pricking, for opacities. Neither patient complained at all, nor was there any redness of the eyes the next day, as the remedy evidently contracts bloodvessels. This property was noticed in all the cases in which it was used. In a case of phlyctenular keratitis, the remedy acted admirably.

At a meeting of the Academy of Medicine, about two weeks ago, Dr. Seely gave a practical demonstration of the action of cocaine. He first had a few drops of a five per cent. solution instilled into his own eye to learn what effect it would have upon a slight neuralgia from which he happened to be suffering. The pain was promptly relieved and did not return for two hours. A few drops of the same solution were then instilled into the eyes of two other members of the Society, and the anæsthetic action of the drug fully demonstrated.

MONTREAL.

(From our Special Correspondent.)

QUEBEC LUNATIC ASYLUMS.—At a largely attended meeting of the Montreal Medico-Chirurgical Society, held on the 7th instant, resolutions were passed and forwarded to the Provincial Government, which strongly condemned the existing method of treating and caring for the insane poor. The following are the most important of these resolutions:

"That it appears to this Society to be the imperative duty of the Provincial Government to institute a thorough investigation, by competent persons, into the entire system of management of the insane poor of this Province.

"That the 'farming' or 'contract' system, either by private individuals or by private corporations, has been everywhere practically abandoned, as being prejudicial to the best interest of the insane, and producing the minimum of cures.

"That all establishments for the treatment of the insane should be owned, controlled, and supervised by the Government.

"That the degree of mechanical restraint known to be employed in our provincial lunatic asylums is excessive," and after alluding to the fact that restraint by mechanical means is unnecessary and obsolete, the resolution continues, "that these facts call urgently, in the name of humanity, for reform in this direction in our provincial asylums."

The present medical management, or rather absence of management, was also condemned, and Dr. Tuke's damaging report stated to be "in every material respect, true and well founded."

THE SANITARY MANAGEMENT OF DIPHTHERIA.—Owing to the prevalence of diphtheria in epidemic form in several parts of the State of Illinois, the State Board of Health, on November 14th, issued the following circular of sanitary information on the subject:

1. If one is subject to catarrh, or inflammatory affections of the throat, especial care should be paid to the condition of the general health and to the general hygienic surroundings. There is reason to believe that diphtheria originates spontaneously in such persons when the system is debilitated from any cause.

2. During the existence of diphtheria, avoid crowded gatherings in badly ventilated rooms, as in theatres, public halls, and even churches. This is of especial importance during cold weather.

3. Secure thorough ventilation and perfect cleanliness of nurseries, kindergartens, school-rooms, and other places where children are cared for. Parents should make it their personal business to secure these in the home and nursery, and to see that those in charge of schools, etc., are also mindful of these important matters. Children are more subject to diphtheria than adults, and the disease is more fatal with

them; hence the necessity of these precautions on their behalf.

4. During the existence of a case of diphtheria in the neighborhood, do not neglect any soreness of the throat, however slight, until assured of its harmless nature by the family physician.

5. Unless absolutely necessary, do not come in contact with, or inhale the breath of, one sick with sore throat. Avoid kissing, or eating, or drinking in common with such sick persons.

6. Diphtheria has so often appeared where uncleanly conditions have prevailed, when it could not be traced to continuous propagation by contagion, that its relation to filth as a cause may be assumed for sanitary purposes. It is immaterial whether the filth exists in visible and disgusting forms, such as the garbage-heap, the cesspool, or the privy-vault, or in the invisible and possibly inodorous gases from an illy constructed sewer, from decaying vegetables in the cellar, or in the poisonous exhalation from the human breath and body in unventilated rooms. All these undoubted causes of ill-health should be at once abated.

7. Because of the fact stated in No. 3, an adult may venture when necessary to come in contact with a case of diphtheria; but no child should ever be so exposed, either directly or indirectly. Adults who are compelled to visit such cases should take the precaution to bathe and change clothing before going near a child. Children should be prevented from entering the water-closet or privy into which diphtheria discharges are thrown, even after disinfection. In short, they should be removed at once and definitely from any possibility of contagion during the existence of a case.

8. Cats, dogs, cows, swine, and some other of the lower animals are known to be subject to diphtheria, and fatal cases among human beings have been contracted from them. Avoid, therefore, having anything to do with a cat, dog, cow, hog, or any other animal suffering from any throat disease until it is known not to be diphtheria.

9. Outbreaks of the disease have been traced to the carriage of the contagion by the wind. Therefore, it is advisable to close the windows and doors, and avoid as much as possible the side of a house toward a known infected house or locality, especially during the prevalence of high winds from that direction.

10. There are no specifics or antidotes for diphtheria. The resort to such can do no possible good, and may lead to harm.

YELLOW FEVER.—There were 24 deaths from yellow fever at Havana during the month of October, out of a total mortality of 549, and 2 deaths from yellow fever during the week ending November 8th.

Gov. Ireland, of Texas, has raised all quarantine restrictions in that State, except against the Island of Cuba.

DARTMOUTH COLLEGE.—At the graduating exercises of the Medical Department of Dartmouth College, held on November 11th, the degree of M.D. was conferred upon eighteen graduates.

OBITUARY RECORD.—Died, at Northampton, Mass., on November 16, of organic disease of the heart, DR. SAMUEL AUGUSTUS FISK, aged sixty-three years. Dr. Fisk was born at Cambridge, Mass., and was educated in Phillips' Exeter Academy and at Yale College, receiving his Bachelor's degree in 1844. He studied medicine at Harvard College and at the University of Pennsylvania; he received his degree from the latter institution in 1846, and settled in Northampton in 1848. He was an ex-President of the Massachusetts Medical Society, was a lecturer on Physiology and Hygiene in Smith College, and a trustee of the Clark Institute for Deaf Mutes.

—— Died, suddenly, at his home in New Orleans, on November 17th, SAMUEL M. BEMISS, in the sixty-fourth year of his age. He was born in Nelson County, Ky., in 1821. His preliminary education being received from his father and private tutors, he subsequently entered the Medical Department of the University of New York, graduating with the degree of M.D. in 1846. He commenced the practice of his profession in Bloomfield, Ky., and remained there until 1853, in which year he removed to Louisville, where he practised until 1865, with the exception of the period from 1862 to 1865, when he was a surgeon in the Confederate army. He was Secretary of the American Medical Association in 1858, and Vice-President in 1868; was a member of the Boston Gynecological Society; in 1858 he was Professor of Clinical Medicine in the University of Louisville; of Hygiene and Medical Jurisprudence in 1859–60; of Materia Medica and Therapeutics in 1861; of Physiology and Pathology in 1865. From the time of his removal to New Orleans, in 1866, up to the time of his death, he was Professor of the Practice of Medicine and of Clinical Medicine in the Medical Department of the University of Louisiana. During the yellow fever epidemic of 1878 he was the representative of the National Board of Health in New Orleans.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT, U. S. ARMY, FROM NOVEMBER 11 TO NOVEMBER 17, 1884.

BYRNE, C. C., *Major and Surgeon.*—Granted four months' leave of absence from November 16, 1884.—*S. O. 265, A. G. O.*, November 11, 1884.

TREMAINE, W. S., *Major and Surgeon.*—Granted leave of absence for one month, on Surgeon's certificate of disability.—*S. O. 233, Department of the East*, November 12, 1884.

HAVARD, VALERY, *Captain and Assistant Surgeon.*—Granted leave of absence for four months, with permission to go beyond sea, to take effect when his services can be dispensed with at his present station.—*S. O. 268, A. G. O.*, November 14, 1884.

SHUFELDT, R. W., *Captain and Assistant Surgeon.*—Assigned to duty as Post Surgeon at Fort Wingate, New Mexico.—*S. O. 217, Department of Missouri*, November 4, 1884.

WM. O. OWEN, JR., *First Lieutenant and Assistant Surgeon.*—Relieved from duty at Fort Canby, Washington Territory, and ordered to Fort Spokane, Washington Territory, for duty.—*S. O. 169, Department of Colorado*, November 4, 1884.

PHILLIPS, JOHN L., *First Lieutenant and Assistant Surgeon.*—Assigned to duty at Fort Keogh, Montana Territory.—*S. O. 134, Department of Dakota*, November 5, 1884.

THE MEDICAL NEWS *will be pleased to receive early intelligence of local events of general medical interest, or of matters which it is desirable to bring to the notice of the profession.*

Local papers containing reports or news items should be marked.

Letters, whether written for publication or private information, must be authenticated by the names and addresses of their writers—of course not necessarily for publication.

All communications relating to the editorial department of the NEWS *should be addressed to No. 1004 Walnut Street, Philadelphia.*